



# American Chemical Society

## COMMITTEE MEMBERS

F. Fleming Crim, *Chair*  
C. Dale Poulter, *Vice Chair*

Robert J. Angelici      Edward N. Kresge  
Charles E. Carraher, Jr.      Margaret V. Merritt  
Royce C. Engstrom      Nancy S. Mills  
Joseph S. Francisco      William F. Polik  
Carlos G. Gutierrez      Joel I. Shulman  
Jeffery W. Kelly      Elizabeth C.  
Theil John W. Kozarich

## Consultants

Jerry R. Mohrig      Jeanne E. Pemberton

## COMMITTEE ON PROFESSIONAL TRAINING

1155 Sixteenth Street, N.W.  
Washington, DC 20036

FAX NUMBER: (202) 872-6066

E-MAIL: [cpt@acs.org](mailto:cpt@acs.org)

Cathy A. Nelson, *Secretary*      (202) 872-4589

21 April 2003

Dr. Philip T. Johns, Chair  
Department of Chemistry  
University of Wisconsin-Whitewater  
Whitewater, WI      53190-1790

Dear Dr. Johns:

Enclosed is a copy of my letter to Chancellor Miller concerning the Committee's evaluation of your program. I am sure you and your colleagues on the chemistry faculty will be pleased to learn of this action of the Committee.

While the Committee praised the high quality of undergraduate research activity in your department, the student research reports need improvement. The Committee suggested that you might wish to consider developing guidelines for students to follow when writing their reports and require more than initial drafts to be prepared with faculty review at each stage. The enclosed research report supplement outlines the Committee's expectations for written reports.

In the curriculum section of your self-study form, Advanced Inorganic Chemistry (640-460) is listed as a required advanced course. The Committee would like to point out that Chemistry 460 is considered part of the required core, and as such, may not be counted toward the six semester hours of advanced work for certification of students. The Committee also wished to remind you that a minimum of two advanced courses (exclusive of undergraduate research) must be taught on a regular schedule.

Instructions for completing the 2002-03 annual report that is required of all ACS-approved programs will be mailed to you this summer. We have certificates available for presentation to your graduates who satisfy the requirements for certification. Starting with the 2002-03 academic year, these certificates can be forwarded to you for presentation to the students, or you can request that we mail the certificates directly to your certified graduates when you submit your annual report each summer.

All official communications from the Committee will be mailed to the chair or head of the chemistry program. Please contact me to verify the name of the current chair and the correct mailing address, telephone and fax numbers, and e-mail address for this person.

If you have any questions or if I can be of assistance in any way to you or your faculty members, please feel free to call on me.

Sincerely,

Cathy A. Nelson  
Secretary  
Committee on Professional Training



# American Chemical Society

## COMMITTEE MEMBERS

F. Fleming Grim, *Chair*  
C. Dale Poulter, *Vice Chair*

|                          |                     |
|--------------------------|---------------------|
| Robert J. Angelici       | Edward N. Kresge    |
| Charles E. Carraher, Jr. | Margaret V. Merritt |
| Royce C. Engstrom        | Nancy S. Mills      |
| Joseph S. Francisco      | William F. Polik    |
| Carlos G. Gutierrez      | Joel I. Shulman     |
| Jeffery W. Kelly         | Elizabeth C. Theil  |
| John W. Kozarich         |                     |

## COMMITTEE ON PROFESSIONAL TRAINING

1155 Sixteenth Street, N.W.  
Washington, DC 20036

FAX NUMBER: (202) 872-6066  
E-MAIL: [cpt@acs.org](mailto:cpt@acs.org)

Cathy A. Nelson, Secretary (202) 872-4589

## Consultants

Jerry R. Mohrig                  Jeanne E. Pemberton

21 April 2003

Dr. John W. Miller, Chancellor Office of  
the Chancellor  
University of Wisconsin-Whitewater 800 West  
Main Street  
Whitewater, WI                  53190-1790

Dear Dr. Miller:

As you know, the American Chemical Society Committee on Professional Training has been cooperating with your university in the evaluation of your undergraduate chemistry program. A visit was made to your campus in October 2002 by Dr. James Finholt, a Visiting Associate of the Committee, and Dr. Finholt's report was reviewed by the Committee at our recent meeting. The Committee is glad to learn that faculty members are encouraged to take sabbatical leaves and that replacements will be hired to ensure that teaching loads do not rise while faculty are on leave. The Committee also praised the remodeling project that will provide each chemistry faculty member with a research laboratory. I am pleased to report that the Committee concluded that your institution's chemistry program meets the spirit and intent of the ACS Guidelines for approved schools, and I am pleased to advise you of the decision of the Committee to include the name of your institution on the list of colleges and universities approved by the American Chemical Society. However, as an approved program, the Committee wished to remind you that all core courses are expected to be taught on an annual basis, and a minimum of two advanced courses must be taught on a regular schedule.

The listing of a department on the approved list of the Society is not granted for any definite period of time, but all approved schools are required to report on their curricular offerings annually (as instructed by my office) and to prepare a more extensive reevaluation report every five years, unless there appears to be reason to submit such a report earlier.

Your bachelor's degree graduates who have majored in chemistry and have fulfilled the minimum requirements as adopted by the Society are eligible for admission as members to the Society following graduation. The chair of the chemistry program may certify these graduates to the Society in the spring after graduation, per the instructions that will be sent to the department every year. Not all chemistry graduates are necessarily expected to meet certification requirements or need to be certified. For instance, there may be students whose major study in chemistry serves as a means to achieve entrance to other fields or for graduate study in an interdisciplinary field. Such graduates may elect to substitute, for certain of the required upper level courses in chemistry, other courses more appropriate to their goals, and these graduates would thus not qualify for certification.

Although the Committee has not insisted upon a description of the guidelines of the Society in the catalog of an institution or in published information describing its educational offerings in chemistry, it is helpful to the student to know in advance exactly what type of program is recommended by the Society for an undergraduate education in chemistry and would be required for certification of the graduate to the Society. Therefore, we hope that adequate provision will be made, either in your catalog or by other means, for a prospective chemistry student to have this information readily available.

We look forward to a continuing and pleasant relationship with your university, and at any time you believe that the Committee might be of further assistance to you, I hope you will contact me.

Sincerely,



Cathy A. Nelson  
Secretary  
Committee on Professional Training

CAN/daa

c: -Dr. Philip T. Johns, Chair, Department of Chemistry Dr. James E. Finholt



October 9, 2001

Ms. Cathy A. Nelson  
Secretary  
Committee on Professional Training  
1155 Sixteenth Street, NW  
Washington, DC 20036

Dear Ms. Nelson:

For several years we have been working to strengthen our chemistry program and be in a position to apply for accreditation. As Provost and Vice Chancellor, I firmly believe that, where appropriate, all of our programs should be accredited. While students receive a quality education in chemistry, we feel that accreditation by ACS is an important external verification of this quality. Over the past few years, we have demonstrated our commitment to the program by enhancing the instrumentation, reducing the contact hours, and successful lobbying for a new science facility.

Next it is our understanding the a visit to our campus by one of your associates is the next step in the evaluation of the Chemistry Department. While the associate is on campus we would visit with him/her and provide any relevant information about our program. The Chair of the Chemistry Department will work with you to arrange an acceptable date for this visit.

We are delighted that your society looked favorably on the progress we made in improving our program and making it more compatible with your guidelines. We look forward to making the next steps towards full accreditation.

Sincerely,

A handwritten signature in black ink, appearing to read 'D. J. Prior', with a stylized flourish at the end.

David J. Prior,  
Provost and Vice Chancellor  
for Academic Affairs

DJP:mys

cc: Dean Howard Ross  
Dr. Philip Johns



# American Chemical Society

## COMMITTEE MEMBERS

Jeanne E. Pemberton, *Chair*  
 Charles E. Carraher, Jr      Edward N. Kresge  
 F. Fleming Grim              Dale W. Margerum  
 Royce C. Engstrom          Margaret V. Merritt  
 Billy Joe Evans              Jerry R. Mohrig  
 Carlos G. Gutierrez        William F. Polik  
 Michael Jaffe                C. Dale Poulter  
 John W. Kozarich          Elizabeth C. Theil

### Consultants

Sally Chapman      Dennis H. Evans  
 Norman C. Craig    Slayton A. Evans, Jr.

## COMMITTEE ON PROFESSIONAL TRAINING

1155 Sixteenth Street, N.W.  
 Washington, DC 20036

FAX NUMBER: (202) 872-6066

E-MAIL: [cpt@acs.org](mailto:cpt@acs.org)

Cathy A. Nelson, *Secretary*      (202) 872-4589

Kevin P. McCue, *Staff Associate*      (202) 872-4599

10 September 2 001

Dr. Philip T. Johns, Chair  
 Department of Chemistry  
 University of Wisconsin-Whitewater  
 Whitewater, WI      53190-1790

Dear Dr. Johns:

The Committee members appreciated the opportunity to talk with you in Chicago about the chemistry program at the University of Wisconsin-Whitewater.

We will be happy to cooperate in a further evaluation of your program by arranging a visit to *your* university by a Visiting Associate of the Committee. The continuation of the evaluation of your program is contingent upon an invitation for the visit from the chancellor of your institution. If the chancellor concurs, would you please ask him to write to me directly indicating that he welcomes the visit and further evaluation of your chemistry program by the American Chemical Society.

Thank you again for meeting with the Committee. If you have questions concerning the visit, please feel free to contact me.

Sincerely,

Cathy A. Nelson  
 Secretary  
 Committee on Professional Training

CAN/daa



June 15, 2001

Cathy A. Nelson  
Secretary  
Committee on Professional Training  
1155 Sixteenth Street, N.W.  
Washington, D.C. 20036 .

Dear Ms. Nelson:

Our department wishes to continue the evaluation process for ACS approval. We have the complete support of Campus Administration in this endeavor.

Enclosed are: one copy of the completed evaluation questionnaire, faculty data sheets, examinations and syllabi for courses taken by chemistry majors and copies of "in-house " laboratory manuals. Copies of recent student research reports are also included. I have also included a floppy disk with questionnaire. Most are on Excel spread sheets. The rest are Word documents.

The program we are proposing for the ACS certified major would consist of course work totaling 47 credits. This would represent an alternate track to the non-certified major of 35 credits. A summary of the certified major is attached.

In your letter of 24 September 1997 (enclosed), a number of . concerns were raised. I would like to address these.

1. The need to lower teaching loads to 15 contact hours or less. On page 15 of the evaluation questionnaire it can be seen that for the last two years no faculty member has taught more than 15 contact hours. The fall class schedule also has contact hours below the 15 hour mark.

2. The need for an Inorganic Chemistry course with laboratory above the General Chemistry level. 640-460 Advanced Inorganic Chemistry was taught the spring of 2000. The course materials (syllabus, experiment list, and examinations) are part of the package.

3. The need to offer Physical Chemistry every year. This has been done for the last three years and will be offered again this fall. We have assurances that it will continue to be offered on an annual basis.

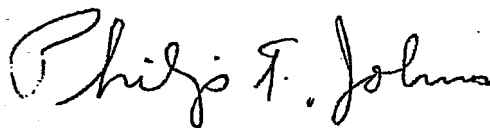
4. The need to offer two advanced courses on an annual basis. Advance Organic (640-455) and Biochemistry (640-456) are offered on an annual basis.

5. Undergraduate research and laboratory space for same. Four of our faculty are doing research with undergraduates, presenting their work at ACS meetings and undergraduate research symposia. With regard to laboratory space, Upham Hall is being remodeled starting in the spring of 2002. In the remodeled building all faculty member will have 400 sq. ft. of individual laboratory space adjacent to their offices.

To get a complete picture of our department it is important to mention the Department's role in general education. The guidelines mention that this is an important function of a department. The Department has for many years taught a Consumer Chemistry course (640-100). The course is designed to meet the laboratory science requirement of the University. In addition to Consumer Chemistry the Department is involved in teaching Science and Technology in Society (600-150). This is a three credit lecture course. In these courses the students are given an appreciation of the role of science in our society. Syllabi and other information on these courses are provided.

If you have any questions on the information given or should require additional materials, please feel free to contact me.

Sincerely yours,



**Philip T. Johns, Chair**  
**Associate Professor of Chemistry**

Enclosures

Telephone: 262-472-1070  
Fax:: 262-472-1070  
e-mail: johnsp@uwwvax.uww.edu



# American Chemical Society

## COMMITTEE MEMBERS

Jerry R. Mohrig, *Chair*

|                       |                       |
|-----------------------|-----------------------|
| Sally Chapman         | Dale W. Margerum      |
| Dennis H. Evans       | C: Bradley Moore      |
| Slayton A. Evans, Jr. | Jeanne E. Pemberton   |
| Michael Jaffe         | C. Date Poulter       |
| Edward N. Kresge      | JoAnne Stubbe         |
| Mitsuru Kubota        | Walter S. Trahanovsky |

### Consultants

|                  |                    |
|------------------|--------------------|
| Norman C. Craig  | Gordon A. Hamilton |
| C. David Gutsche | Herbert D. Kaesz   |

## COMMITTEE ON PROFESSIONAL TRAINING

1155 Sixteenth Street, N.W.  
Washington, DC 20036

FAX NUMBER: (202) 872-6066

INTERNET: can98@acs.org

|  |                |
|--|----------------|
| Cathy A. Matson, <i>Secretary</i>          | (202) 872-4589 |
| Stacie D. Marshall, <i>Staff Associate</i> | (202) 872-4599 |

24 September 1997

Dr. Steven W. Anderson, Chair .  
Department of Chemistry  
University of Wisconsin-Whitewater  
Whitewater, Wisconsin 53190-1790

Dear Dr. Anderson:

The Committee appreciated the opportunity to talk with you about your application for ACS approval and was pleased to learn of your dean's support for this endeavor. The discussion was very helpful to the members in obtaining a better understanding' of your program and its objectives. However, the Committee expressed several concerns that would need to be addressed before discussion of your application for approval could continue.

The current ACS guidelines state that "Under no circumstance' should a teaching load exceed 15 contact hours per week, and significantly lower loads are strongly recommended by the Committee." According to the teaching load summary that you provided, teaching loads exceeded 15 contact hours for four of your seven chemistry faculty members, and the average load for the department was reported as 16.8 contact hours. The Committee expects approved programs to be able to teach all the required core and advanced courses on a regular basis without exceeding the maximum acceptable teaching load for any individual faculty member. Before proceeding to the next step in the approval process, the Committee would have to see that you have a stable arrangement in place to ensure that teaching loads remain at or below the maximum of 15 contact hours per week for every faculty member during each academic term.

As the Committee members discussed with you, the guidelines require that the chemistry core curriculum must provide students with inorganic lecture and laboratory work beyond general chemistry. On your application you indicated that an inorganic course with laboratory was proposed, but during the conference you said that the inorganic chemist had left your department. In addition, descriptive inorganic chemistry of the elements should be covered early in the curriculum that you would require for ACS certification. In order to obtain ACS approval the courses that satisfy the core inorganic lecture and laboratory requirement must have been taught and scheduled on a regular, preferably annual, basis. The Committee would need to see copies of the syllabi, lab experiment lists, and examinations used in the courses that fulfill the core inorganic chemistry requirement.

Also, with respect to the core curriculum, the Committee expressed concern that you do not teach core physical chemistry (640-370 and 640-371) and lab (640-470 and 640-471) on an annual basis. You also listed the physical chemistry sequence as part of the fourth year of the major's recommended program. The Committee often

finds that students have difficulty in satisfying certification requirements, which includes two advanced courses based on the content of the core curriculum, when physical chemistry is not taught every year and is not taken until the senior year of the program. In addition, the level at which upper level core and advanced course selections can be taught suffers if the principles of physical chemistry cannot serve as a prerequisite. During the conference you stated that physical chemistry was being taught in a second consecutive year for the first time in 1995\_96. The Committee would need to know that you are able to continue. an annual schedule for those courses.

After reviewing the curriculum information provided in your application form, the Committee would like to clarify the distinction between core and advanced course work for: certification purposes. In response to Item III .B., you indicated that you would require Inorganic Chemistry (640-460) and Instrumental Methods of Analysis (640-480) as advanced courses that you would use to certify students.' Both of these courses are considered part of the core curriculum. The Committee also would like to emphasize that all core courses (including 640-370, 640-371, 640-460, 640-470, 640-471, and 640-480) should be taught as regular course offerings, not as independent study. Faculty should receive full teaching load credit. for teaching all of the core and advanced courses, as well.

The ACS guidelines specify that two advanced courses should be offered on an annual basis. After removing the core courses from your list, the remaining advanced course selections you listed are 640-455, 640-456, 640-494, and 640-498. Seminar - (640-494) is not usually accepted as an advanced level course for certification purposes, and 640-498 is Independent Study (see below for further discussion of the research component of your program). This leaves only two possible courses to satisfy the advanced course requirement. -. Biochemistry. (640-456) appears to be taught at an appropriate level and is offered annually according to your application form. However, as. noted during your conference, the Committee has some concern about the level at which Advanced Organic Chemistry (640-455) is being taught, and it is not offered every year. The Committee would like to point out that the content of the advanced courses should be built on the core material, and the examinations should require more complex problem solving than in core. courses. The Committee would like to see course documentation on 640455 after you have strengthened the content and evidence that you will be able to maintain a regular schedule of advanced course offerings.'

During your conference with the Committee, you reported that you expected an increase. in faculty research involving: undergraduates as you hire new faculty members and identify appropriate lab' space. While not required for approval, the Committee considers undergraduate research to be an excellent experience for students and important to the professional growth of faculty members. The Committee encourages you to work with your administration and your faculty to develop art environment that is supportive of undergraduate research and looks forward to learning of your progress in this area. Also, the Committee observed that the student reports that were submitted with your application appeared to be more like reports on laboratory exercises rather than true research projects. The Committee encourages you to work with your faculty and develop guidelines for what is expected in an undergraduate research project and the written report. As stated in the ACS guidelines, undergraduate research may be used by students to satisfy the advanced course requirement for certification but does not count toward the two advanced courses that must be taught in order to obtain ACS approval.

You reported in your application that no sabbatical leaves had been taken by the ' members of the chemistry faculty in the last ten years. The Committee very strongly ' believes that an active sabbatical program helps to maintain the viability of a chemistry department and encourages your faculty to take advantage of this opportunity for professional renewal and development as often as your institution allows.

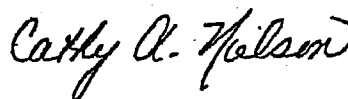
In your application and your conference, you described your laboratory space as crowded for upper level lab courses and not available for inorganic lab and undergraduate research activities. The Committee understands that some possible solutions had been identified at the time of your conference and would like to learn of the progress that has been made in increasing the space available to the chemistry program.

Many of the problems described in this letter involve the regularity with which your upper level chemistry courses are taught. The Committee suggested that you may need to have more majors than two to three per year in order to sustain a viable approved program over time. The Committee would be interested to hear about any expanded recruitment activities that your institution and the chemistry faculty have implemented to ensure an adequate number of students major in chemistry to justify the commitment and investment in the program.

The Committee hopes that the comments in this letter will be helpful to you as you develop your undergraduate chemistry program and looks forward to hearing from you when you have had the opportunity to address their concerns. The usual deadline for materials to be reviewed by the Committee at our spring meetings is January 15 and June 30 for fall meetings.

I am sorry for the delay in relaying the Committee's comments regarding your program. If you have any questions concerning the Committee's review of your application or would like assistance as you respond to the concerns raised, please feel free to contact me.

Sincerely,



Cathy A. Nelson  
Secretary  
Committee on Professional Training

CAN/daa

## CERTIFIED ACS CHEMISTRY MAJOR

| Required Core Courses       |           |            |            | Advanced Courses <sup>+</sup> |         |       |                     |
|-----------------------------|-----------|------------|------------|-------------------------------|---------|-------|---------------------|
| Total hrs/term <sup>#</sup> |           |            |            | Total hrs/term <sup>#</sup>   |         |       |                     |
| Course                      | Credits   | Lec.       | Lab        | Course                        | Credits | Lec.  | Lab                 |
| 640-102                     | 5         | 64         | 44         | 640-455                       | 3       | 48    |                     |
| -104                        | 5         | 64         | 44         |                               |         |       |                     |
| -251                        | 3         | 48         |            | -496                          | 1-3     | 16-48 | 48-144 <sup>@</sup> |
| -252                        | 3         | 48         |            | -498                          | 1-3     |       | 48-144              |
| -261                        | 2         |            | 96         |                               |         |       |                     |
| -262                        | 2         |            | 96         |                               |         |       |                     |
| -352                        | 5         | 48         | 96         |                               |         |       |                     |
| -370                        | 3         | 48         |            |                               |         |       |                     |
| -371                        | 3         | 48         |            |                               |         |       |                     |
| -456                        | 3         | 48         |            |                               |         |       |                     |
| -460                        | 4         | 48         | 64         |                               |         |       |                     |
| -470                        | 2         |            | 64         |                               |         |       |                     |
| -471                        | 2         |            | 64         |                               |         |       |                     |
| -480                        | 4         | 32         | 64         |                               |         |       |                     |
| -494*                       | 1         | 16         |            |                               |         |       |                     |
| <b>Core Total</b>           | <b>47</b> | <b>512</b> | <b>632</b> |                               |         |       |                     |

<sup>+</sup>Students must choose one course from this list or one course from an approved advanced math or physics course.

<sup>#</sup>Assuming a 16 week semester where one lecture hour = 50 min and one lab hour = 60 min.

<sup>\*</sup>Required of all senior chemistry majors; the actual course could be 0.5 credits taken over the senior year (meeting every other week for 16 periods).

<sup>@</sup> This course would be used to fulfill either lecture or lab credit (but not both unless a special lecture /lab course were arranged). It has been used for lab credit for off-campus research experiences (e.g., NSF-REU's).

GRAND TOTAL:

Minimum lecture hours total (with two 3-credit lecture courses) as advanced courses: 496 hrs.  
 Minimum lab hours total (with one 1-credit lab course and one 3-credit lecture course ) as advanced courses: 576 hrs.-

SUMMARY SHEET  
COMMITTEE ON PROFESSIONAL TRAINING  
AMERICAN CHEMICAL SOCIETY

Please fill in the following summary information of requirements for your graduates who would be certified to the ACS. The number in parentheses is in each case is the recommended minimum or maximum for that item as specified in the guidelines for ACS approved programs.

Name of School University of Wisconsin-Whitewater  
City, State Whitewater, Wisconsin,

1. Required hours of lecture in chemistry (min 400) 464
2. Required hours of laboratory in chemistry (min. 500) 576
3. Are you on the quarter \_\_\_\_\_ semester X, or other \_\_\_\_\_ system If other, please specify
4. Required courses

Indicate whether given annually (A), biennially(B), or on demand (D). if physical chemistry **is** a pre-requisite(P), and give number of semesters (#).

|                              | <u>A</u> | <u>B</u> | <u>D</u> | <u>P</u> | <u>#</u> |
|------------------------------|----------|----------|----------|----------|----------|
| <b>Analytical Chemistry</b>  |          |          |          |          |          |
| basic course (s)             | <u>X</u> | <u>-</u> | <u>-</u> | <u>-</u> | <u>1</u> |
| advanced course(s)           | <u>-</u> | <u>X</u> | <u>-</u> | <u>-</u> | <u>1</u> |
| <b>Inorganic Chemistry</b>   |          |          |          |          |          |
| basic course(s)              | <u>-</u> | <u>-</u> | <u>-</u> | <u>-</u> | <u>-</u> |
| advanced course(s)           | <u>-</u> | <u>X</u> | <u>-</u> | <u>X</u> | <u>1</u> |
| <b>Organic Chemistry</b>     | <u>X</u> | <u>-</u> | <u>-</u> | <u>-</u> | <u>2</u> |
| <b>Physical Chemistry</b>    | <u>X</u> | <u>-</u> | <u>-</u> | <u>-</u> | <u>2</u> |
| <b>Biochemistry</b>          | <u>X</u> | <u>-</u> | <u>-</u> | <u>-</u> | <u>1</u> |
| <b>Other: <u>Seminar</u></b> |          |          | <u>X</u> |          |          |
| _____                        |          |          |          |          |          |

5. Number of full-time teaching staff (min 4) 7.5
6. Number of Ph.D.'s teaching (min 75% of No 5 above) 100%
7. Range of teaching loads [actual contacts hours/week] 12.3 to 13.9.
8. Average teaching loads [actual contact hours/week] (max. 15) 12.9

Signed: Philip J. Johnson

Title: Chair and Associate Professor of Chemistry

## Curriculum Summary (Continued)

## N. COOPERATIVE WORK

1. DOES YOUR PROGRAM OFFER ANY OFF CAMPUS COOPERATIVE OF INTERNSHIP TYPE OF WORK? YES \_\_\_; NO \_\_\_X\_\_\_. IF SO, PROVIDE BRIEF DETAILS OF ARRANGEMENTS.
2. IS ACADEMIC CREDIT GIVEN FOR OFF CAMPUS STUDY? YES \_\_\_; NO \_\_\_X\_\_\_. IF SO, WHAT IS MAXIMUM CREDIT ALLOWED FOR
  - a. COURSE LECTURES \_\_\_
  - b. LABORATORY WORK \_\_\_
  - c. HOW MUCH CREDIT WOULD BE COUNTED FOR ACS CERTIFICATION FOR LECTURES \_\_\_; LABORATORY \_\_\_
3. HOW IS NATURE AND EXTENT OF OFF CAMPUS STUDY DETERMINED AND SUPERVISED FOR EACH STUDENT? Not applicable
4. ARE WRITTEN REPORTS OR FINAL EXAMINATIONS REQUIRED FOR EACH OFF CAMPUS ASSIGNMENT? YES \_\_\_; NO \_\_\_X\_\_\_. IF SO, PROVIDE BRIEF DETAILS. Not applicable
5. WHAT IS TOTAL NUMBER OF STUDENTS INVOLVED IN COOPERATIVE WORK FOR CURRENT ACADEMIC YEAR \_\_\_; PRECEDING ACADEMIC YEAR \_\_\_  
Not applicable

## O. DISCUSS BRIEFLY ANY FEATURES OF YOUR UNDERGRADUATE CHEMISTRY PROGRAM AND/OR CURRICULUM THAT YOU CONSIDER TO BE UNIQUE WITH RESPECT TO EDUCATIONAL INNOVATION OR OTHER ESPECIALLY EFFECTIVE TECHNIQUES THAT IMPROVE AND ADVANCE THE EDUCATIONAL PROCESS.

Two curricular strengths of this program are the strong core of contemporary instrumentation and the pedagogical method of utilization thereof. The Department has FT-IR, NMR, gas chromatographs, UV, GC-MS system, DSC, electrochemical analyzer, lasers, and Silicon Graphics computers for molecular modeling. Students have always had "hands-on" access to all instruments regardless of their sophistication. Instruments have been used by students as an integral part of the laboratory experience. The provision of this type of student experience initially involves a very high cost in terms of the required individual student-faculty contact but students develop independence and are able to recognize instrument difficulties and can often recognize instrument malfunctioning and failure.

## P. PLEASE PROVIDE TWO COPIES OF THE CURRENT COLLEGE CATALOGUE. IF THERE ARE UNDERGRADUATE CHEMISTRY COURSES LISTED IN THE CATALOGUE FOR CHEMISTRY MAJORS BUT NOT LISTED IN THE ABOVE SUMMARY, EXPLAIN THE DISCREPANCIES.

The online bulletin is at <http://www.uww.edu/Bulletin/introub.html>.

**EVALUATION QUESTIONNAIRE  
FOR SCHOOLS APPLYING FOR ACS APPROVAL  
OF THEIR UNDERGRADUATE CHEMISTRY PROGRAMS**

Careful study of the current ACS guidelines for undergraduate chemistry programs should precede preparation of this report form. Several sections of the report correspond generally to similar sections in the published guidelines; specific questions and/or requests for information relate directly to these guidelines. A copy of the guidelines booklet accompanies this report form.

In a formal evaluation, the Committee considers not only the adequacy of an undergraduate program in chemistry to prepare baccalaureate students for professional careers as chemical scientists but also the suitability of the chemistry course offerings to accommodate non-chemistry majors who require a less intensive education in chemistry. Hence, the report incorporates some questions and/or requests for information designed to assist both the institution and the Committee in assessing the extent to which the overall program in chemistry is successful in meeting broader as well as specialized education objectives. If you use additional sheets of paper in preparing this report, please be sure that each page is dated and includes the name of your institution.

NAME OF INSTITUTION University of Wisconsin-Whitewater DATE June 15, 2001  
 CITY AND STATE Whitewater, Wisconsin ZIP CODE 53190-1790  
 NAME AND TITLE OF PRINCIPAL ADMINISTRATIVE OFFICER OF INSTITUTION Dr. John W. Miller, Chancellor  
 NAME AND TITLE OF CHAIR OR HEAD OF CHEMISTRY DEPARTMENT Dr. Phillip T. Johns, Chair and Associate Professor  
 NAME AND TITLE OF PERSON PREPARING THIS REPORT Dr. Phillip T. Johns, Chair and Associate Professor  
 CHECK BASIS OF ACADEMIC YEAR: QUARTER \_\_\_\_\_ SEMESTER X OTHER (SPECIFY): \_\_\_\_\_  
 NUMBER OF WEEKS OF INSTRUCTION (NOT COUNTING FINAL EXAMINATION PERIOD) PER QUARTER \_\_\_\_\_ SEMESTER \_\_\_\_\_  
 MINI OR INTERIM TERM 12 (summer) \_\_\_\_\_  
 IS INSTITUTION ACCREDITED BY REGIONAL ACCREDITING ASSOCIATION? \_\_\_\_\_ YES \_\_\_\_\_

|                            |     |
|----------------------------|-----|
| Do not write in this space |     |
| R                          | S-Q |
| A                          | CSL |
| CAT                        | FUB |
| CCM                        | FOG |
| C-N                        |     |

Signed: Phillip T. Johns  
 (signature of person preparing report)

## SECTION 1

2

## PROGRAM ORGANIZATION AND STRUCTURE

- A. IS CHEMISTRY DEPARTMENT ORGANIZED AS AN INDEPENDENT ADMINISTRATIVE UNIT? YES  ; NO  IF NOT, HOW IS DEPARTMENT AND/OR PROGRAM ADMINISTERED AND TO WHOM DOES DEPARTMENT ADMINISTRATOR REPORT?

- B. CHECK DEGREES OFFERED IN CHEMISTRY:

BA  X BS  X  
 MA  MS   
 PHD  Other (explain) \_\_\_\_\_

- C. NUMBER OF STUDENTS AT BEGINNING OF ACADEMIC YEAR:

ENTIRE CAMPUS (FULL-TIME EQUIVALENTS) 10,540  
 ALL CHEMISTRY COURSES 407  
 CHEMISTRY MAJOR SENIORS 10  
 GRADUATE STUDENTS 0

- D. DISCUSS ANY SPECIAL GOALS OR RELATIONSHIPS OF THE CHEMISTRY DEPARTMENT AND/OR PROGRAM AS THESE PERTAIN TO THE EDUCATIONAL OBJECTIVES OF YOU INSTITUTION. All of the department's stated program objectives contribute to that part of the unit mission "...to develop scientific, professional, and technological expertise toward the development of the human condition."

- E. WHAT IS THE EXTENT OF THE SERVICE RESPONSIBILITY OF THE CHEMISTRY DEPARTMENT WITH RESPECT TO STUDENTS MAJORING IN SUBJECTS OF FIELDS OTHER THAN CHEMISTRY? Approximately 90% of the students served by this department are non-majors. Professional and pre-professional programs which are heavily dependent upon chemistry include: biological sciences, physics, geology, occupational safety, pre-medicine, pre-engineering, pre-pharmacy, pre-chiropractic, pre-optometry, pre-medical technology, pre-physical therapy. The department's offerings also contribute significantly to the breadth and strength of the general education program.

- F. DOES YOUR INSTITUTION HAVE ANY ESTABLISHED POLICY, PROCEDURE AND TIME SCHEDULE FOR THE SELF-EVALUATION OF SPECIALIZED PROGRAMS AND CURRICULA, SUCH AS CHEMISTRY? YES  ; NO  IF SO WHAT GROUPS PARTICIPATE IN THE SELF EVALUATION PROCESS (e.g., FACULTY COMMITTEES, OTHER TYPES OF INSTITUTIONAL COMMITTEES, DEPARTMENTAL ADVISORY COMMITTEES, CHEMISTRY FACULTY STUDENT GROUPS, ALUMNI, EMPLOYERS OF CHEMISTRY GRADUATES, GRADUATE SCHOOLS ATTENDED BY CHEMISTRY GRADUATES, ETC.)? The Department of Chemistry is evaluated through an Audit and Review process every five years. A comprehensive report is reviewed by a University Faculty committee. As part of the Audit and Review process the Department completes an assessment report. The assessment process includes exit interviews of graduating Chemistry majors and student performance on standardized and department generated exams.

SECTION II  
FINANCIAL SUPPORT

A. DOES CHEMISTRY DEPARTMENT AND/OR PROGRAM HAVE A SEPARATE BUDGET? YES X; NO    . IF NOT, HOW ARE PROGRAM FUNDS PROVIDED?

B. IF PROGRAM HAS A SEPARATE BUDGET, DOES CHEMISTRY DEPARTMENT HAVE FULL ADMINISTRATIVE CONTROL OF BUDGET? YES X; NO    . IF NOT, HOW IS ADMINISTRATION AND CONTROL HANDLED?

C. GIVE APPROXIMATE ANNUAL EXPENDITURE OF INSTITUTIONAL FUNDS FOR:

|  | CURRENT FISCAL YEAR | FIVE-YEAR ANNUAL AVERAGE |
|--|---------------------|--------------------------|
| 1. TOTAL EXPENSES (EXCLUSIVE OF FACULTY SALARIES)        | \$45,078            | \$49,553                 |
| 2. CAPITAL EQUIPMENT ACQUISITIONS AND REPLACEMENTS       | \$21,302            | \$26,006                 |
| 3. NON-CAPITAL AND EXPENDABLE ITEMS                      | \$17,508            | \$17,255                 |
| 4. CHEMISTRY LIBRARY                                     | \$2,330             | \$2,220                  |
| 5. EQUIPMENT AND INSTRUMENTAL MAINTENANCE                | \$1,200             | \$1,200                  |
| 6. FACULTY AND STUDENT RESEARCH                          | \$1,050             | \$1,670                  |
| 7. FACULTY TRAVEL TO MEETINGS (TOTAL NO. OF FACULTY = 6) | \$1,688             | \$1,202                  |
| 8. SALARY TOTAL FOR                                      | 0                   | 0                        |
| a. UNDERGRADUATE STUDENT ASSISTANTS                      | 0                   | 0                        |
| b. GRADUATE STUDENTS TEACHING ASSISTANTS                 | 0                   | 0                        |
| c. GRADUATE STUDENT RESEARCH ASSISTANTS                  | 0                   | 0                        |
| d. NON-ACADEMIC SUPPORT PERSONNEL                        | \$49,900            | \$46,650                 |

D. IS YOUR PROGRAM DEPENDENT SOLELY FOR SUPPORT ON INSTITUTIONAL FUNDS: YES    ; NO X. IF NOT, LIST BELOW THE OTHER PRINCIPAL SOURCES OF INCOME AND THE EXTENT TO WHICH EACH PROVIDES CONTINUING SUPPORT

|  | CURRENT YEAR | ESTIMATED FIVE-YEAR ANNUAL AVERAGE | CONTINUING (YES OR NO) |
|--|--------------|------------------------------------|------------------------|
| 1. OUTSIDE RESEARCH GRANTS TO FACULTY MEMBERS  |              |                                    | No                     |
| 2. OUTSIDE GRANTS TO DEPARTMENT  | \$85,831     | \$600                              | No                     |
| 3. OTHER, i.e., ENDOWMENT FUNDS (EXPLAIN)  |              | \$31,737                           | No                     |
| 4. LIST ON AN ATTACHED SHEET THE MOST RECENT (UP TO 100 EXTERNAL PROPOSALS OR GRANT REQUESTS SUBMITTED FOR SUPPORT OF RESEARCH, SCIENCE INSTRUCTION, OR PROGRAM SUPPORT. INDICATE THOSE THAT WERE ACTUALLY FUNDED. |              |                                    |                        |

**EXTRAMURAL GRANT PROPOSALS**

1. Traore, H., PI, CO-PI's: Anderson, S, Johns, P., Ghosh, S. (Biological Sciences), Travis, D. (Geography), to NSF for \$81,931. "Computational and Visualization Laboratory". **Funded**, spring 2000.
2. Han, B., PI, CO-PI's: Jacobs, P. (Geography), and Eshelman, B. (Biological Sciences). "Application of Atomic Absorption Spectrophotometer in Innovative and Interactive Laboratory Instruction", to NSF, June 2000, not funded.
3. Ghosh, S. (Biological Sciences), PI, CO PI's: Anderson, S., Tesar, G. (Marketing), and Porter, D. (Finance), NSF-CCLI grant for the Science - Business Program. Funding declined, re-submitted June 2000.
4. Ghosh, S. (Biological Sciences), PI, CO-PI's: Anderson, S., and Porter, D. (Finance), FIPSE grant submitted for the Science:- Business Program in Feb. 2000, \$170,560.
5. Kumpaty, H., PI, CO-PI's: Anderson, S., and Johns, P., "Developing Guided Inquiry Based Labs in the Organic Chemistry Laboratory Curriculum", "University of Wisconsin Strategic Initiative Grant Program" and was **funded** in- March, 2000. (\$3900).
6. Ghosh, S. (Biological Sciences), CO-PI's: Anderson; S., and Porter; D., (Finance) NSF- grant for the Science - Business Program in June 2000, \$465,037.
7. Kumpaty, H., "Reductive Amination Reactions Using Titanium (IV) Isopropoxide", University of Wisconsin-Whitewater Faculty Development Program, funded in November 1999, (\$3000).
8. Traore, H., PI, CO-PI's: Anderson, S., Johns, P., Ghosh: S. (Biological Sciences), and Travis D. (Geography), "Computer Workshop To Integrate Computer Modeling into Mathematics, Chemistry, Biological Sciences and Geography" University of Wisconsin System Curricular Redesign Grants (\$63,000) Submitted February 26, 1999, not funded.
9. Traore, H., Grant from UW-Whitewater: Faculty Development Grant. Computer . workshop. Participants: Anderson S., Ghosh S., **funded**, \$3000 for summer 1999.
10. Han, B.; PI, CO-PI's: Jacobs, P., (Geography), and Eshelman, B., (Biological Sciences), Application of Atomic Absorption Spectrophotometer in Innovative and Interactive Laboratory Instruction", submitted to NSF-CCLI, 1998, \$25,372, not funded.
11. Han, B., to ACS Petroleum Research Fund 1997, "Synthesis and Characterization of Complexes Containing Multiple Diruthenium Units" \$25,000, not funded.

**EXTRAMURAL GRANT PROPOSALS**

12. Anderson, S., PI, CO-PI's: West, K., Downing, H., (Biological Sciences), Travis, J., (Geology); NSF-ILI. grant for a gas chromatograph - mass spectrometer funded for \$69,854; 1994-1996.

Section III  
Curriculum Summary

**CURRICULUM OF REQUIRED COURSES  
FOR CERTIFIED GRADUATES**

INSTITUTION University of Wisconsin-Whitewater  
DATE 6/15/01

A chemistry student wishing to be certified to the Society at the time of receiving the baccalaureate degree should have completed successfully a curriculum as defined on pages 7-16 of the ACS Guidelines, namely the equivalent of one year of each of analytical, inorganic, organic, and physical chemistry and one year of advanced courses. Total class hours in chemistry should exceed 400, total lab hours 500 (with usually not more than 100 hours of research included in the 500).

A.

List below all required courses in chemistry, physics and mathematics in their normal progression. The total hour figures requested in column 4 should total class and laboratory hours for the entire period of the course, excluding examination periods (e.g., a two-semester course in organic chemistry with three class and four laboratory hours per week for a total of 30 weeks would be reported as 90 class and 120 laboratory hours). If desired, amplifying remarks may be added by a numbered footnote using a separate, attached page for the purpose.

| 1<br>COURSE<br>NUMBER | 2<br>COURSE TITLE                  | 3<br>PRE-<br>REQUISITES          | 4<br>TOTAL<br>HOURS |     | 5<br>TEXTBOOK AND AUTHOR                        | 6<br>MAX. NO.<br>STUDENTS<br>PER LAB<br>SECTION | 7<br>NUMBER<br>ASSTS.<br>PER LAB<br>SECTION | 8<br>OFFERED<br>EVERY<br>YEAR |    | 9<br>COURSE LAST<br>OFFERED |                       |
|-----------------------|------------------------------------|----------------------------------|---------------------|-----|---|---|---|-------------------------------|----|-----------------------------|-----------------------|
|                       |                                    |                                  | LEC                 | LAB |   |   |   | YES                           | NO | DATE                        | TOTAL EN-<br>ROLLMENT |
| 640-102               | Intro Chemistry                    | 760-141 (a)                      | 64                  | 48  | Chemistry (2E) Silberberg                       | 20  | 0   |                               | x  | Sp. 01                      | 110                   |
| 640-104               | Intro Chemistry                    | 640-102                          | 64                  | 48  | Chemistry (2E) Silberberg                       |   |   |                               |    | Sp. 01                      | 70                    |
| 760-253               | Calculus & Analytic<br>Geometry I  | 760-152                          | 80                  | 80  | Calculus, (4E) Stewart                          |   |   |                               |    |                             |                       |
| 760-254               | Calculus & Analytic<br>Geometry II | 760-253                          | 80                  | 80  | Same as 760-253                                 |   |   |                               |    |                             |                       |
| 800-170               | Intro Physics I                    | 760-152<br>co-req                | 48                  | 48  | Physics for Scientists and<br>Engineers, Serway |   |   |                               |    |                             |                       |
| 800-172               | Intro Physics II                   | 800-170                          | 48                  | 48  |   |   |   |                               |    |                             |                       |
| 800-173               | Intro Physics I Lab                | 760-253(coreq)<br>760-172(coreq) | 64                  | 64  |   |   |   |                               |    |                             |                       |

1§  
YEAR

Section III  
Curriculum Summary

CURRICULUM OF REQUIRED COURSES FOR CERTIFIED GRADUATES

University of Wisconsin-Whitewater

INSTITUTION DATE 6/15/01

| 1<br>COURSE NUMBER | 2<br>COURSE TITLE                | 3<br>PRE-REQUISITES      | 4<br>TOTAL HOURS |     | 5<br>TEXTBOOK AND AUTHOR                   | 6<br>MAX. NO. STUDENTS PER LAB SECTION | 7<br>NUMBER ASSTS. PER LAB SECTION | 8<br>OFFERED EVERY YEAR |    | 9<br>COURSE LAST OFFERED |                  |
|--------------------|----------------------------------|--------------------------|------------------|-----|--|--|------------------------------------|-------------------------|----|--------------------------|------------------|
|                    |                                  |                          | LEC              | LAB |  |  |                                    | YES                     | NO | DATE                     | TOTAL ENROLLMENT |
| 640-251            | Organic Chemistry                | 640-104                  | 48               |     | Organic Chemistry, Fox & Whitesell         |  |                                    | X                       |    | Sp. 01                   | 24               |
| 2ND<br>YE 640-261  | Organic Chemistry Laboratory     | 640-251 coreq            |                  | 96  | In House Manual + Intro Organic Lab, Pavia | 15                                     |                                    | X                       |    | Sp. 01                   | 30               |
| 640-252            | Organic Chemistry                | 640-251                  | 48               |     | Organic Lab Survival, Zubrick              |  |                                    | X                       |    | Sp 01                    | 52               |
| 640-352            | Quantitative Analysis            | 640-104                  | 48               |     | same as 251                                | 15                                     |                                    | X                       |    | Fall 00                  | 27               |
| 640-262            | Organic Chemistry Laboratory     | 640-261 & 640-252(coreq) |                  | 96  | Quant Chem Anal, Harris                    | 15                                     |                                    | X                       |    | Sp 01                    | 15               |
| 800-174            | Intro Physics III                | 800-172 & 760-254(coreq) |                  | 48  | Same as 800-170                            |  |                                    | X                       |    |                          |                  |
| 800-175            | Intro Physics Lab II             | 800-174                  |                  | 48  |  |  |                                    | X                       |    |                          |                  |
| 760-255            | Calculus & Analytic Geometry III | 760-254                  |                  | 48  | Same as 760-253                            |  |                                    | X                       |    |                          |                  |

|                     |                               |                               |    |    |                                     |    |  |   |  |         |   |
|---------------------|-------------------------------|-------------------------------|----|----|-------------------------------------|----|--|---|--|---------|---|
| 640-370             | Physical Chemistry            | 640-352, 760-255              | 48 |    | Physical Chemistry, Atkins 6E       |    |  | X |  | Fall 00 | 4 |
| 3rd<br>YEAR 640-470 | Physical Chemistry Laboratory | 800-175(coreq) 640-370(coreq) |    | 64 | Physical Chemistry Lab Shoemaker 3E | 12 |  | X |  | Fall 00 | 4 |
| 640-371             | Physical Chemistry            | 640-370                       | 48 |    | Same as 370                         |    |  | X |  | Sp. 01  | 6 |
| 640-471             | Physical Chemistry            | 640-371(coreq) 640-470        |    | 64 | Same as 470                         | 12 |  | X |  | Sp. 01  | 3 |



## Curriculum Summary (Continued)

B. STATE PRECISELY WHAT COMBINATION OF THE ADVANCED CHEMISTRY COURSES LISTED ON THE PRECEDING PAGE YOU WOULD REQUIRE TO CERTIFY A GRADUATE

Required: 640-460, 640-456, 640-498

and choose one: 640-455, 640-498 or an approved advanced math or physics course.

C. WHAT MINIMUM TOTAL NUMBER OF FORMAL CHEMISTRY CLASS LECTURE AND LABORATORY HOURS WOULD YOU CONSIDER NECESSARY FOR A GRADUATE TO BE CERTIFIED BASED UPON THE COURSES LISTED AS REQUIRED IN THE PRECEDING SUMMARY?

TOTAL FOR CLASS LECTURE 480

TOTAL FOR LABORATORY 568

D. TO WHAT EXTENT ARE EXCEPTIONS MADE FOR ADMISSION TO COURSES OF STUDENTS NOT HAVING FULFILLED THE COURSE PREREQUISITES AS SPECIFIED IN THE COLLEGE CATALOGUE; AND IF EXCEPTIONS ARE MADE WHAT COURSES ARE INVOLVED?

Under extraordinary circumstances, students who have completed the non-calculus Physics sequence before becoming Chemistry majors are allowed into Physical Chemistry.

E. INDICATE ANY JUNIOR OR SENIOR LEVEL COURSES NORMALLY OFFERED BY FACULTY MEMBERS NOT HOLDING THE Ph.D. DEGREE.

none

F. INDICATE ANY JUNIOR OR SENIOR LEVEL COURSES NORMALLY OFFERED AND TAUGHT BY ADJUNCT OR PART TIME FACULTY.

none

G. DOES YOUR INSTITUTION REQUIRE A MINIMUM ENROLLMENT OR CLASS SIZE BEFORE A COURSE CAN BE GIVEN? YES X NO       

Generally a course with less than 6 students is not allowed to proceed.

H. IF CLASS SIZE OR ENROLLMENT MINIMUM EXISTS, EXPLAIN HOW THE REGULAR OFFERING OF THE REQUIRED UPPER LEVEL AND ADVANCED CHEMISTRY COURSES AS SPECIFIED IN THE ACS CRITERIA COULD BE ASSURED WHEN ENROLLMENTS FOR ANY PARTICULAR COURSE WERE LESS THAN THE MINIMUM.

Recently, Physical Chemistry was allowed to proceed without the minimum number of students. Overall, even the advanced courses have had more than the minimum number of students.

I. STUDENT UNDERGRADUATE RESEARCH

DOES YOUR UNDERGRADUATE PROGRAM OFFER A RESEARCH OR SIMILAR TYPE OF LABORATORY PROJECT? YES X NO        IF SO

1. ARE LIBRARY SEARCHES CONSIDERED "RESEARCH"? YES        NO X

2. IS COURSE REQUIRED OF ALL UNDERGRADUATE CHEMISTRY MAJORS? YES        NO X

3. HOW ARE STUDENTS COUNSELED IN THE SELECTION OF PROJECTS?

This is a mutual decision of the Faculty member and the student based upon the student's abilities, interests, and the number of credits of research they wish to enroll for.

Section III  
Curriculum Summary (Continued)

I. STUDENT UNDERGRADUATE RESEARCH (continued)

4. WHAT IS THE NATURE OF FACULTY SUPERVISION OF EACH PROJECT? The extent of Faculty supervision is commensurate with the level of training of the students. Students may start from the sophomore level on up. More supervision would be expected at the beginning followed by a gradual decrease with time.
5. ARE FINAL WRITTEN REPORTS REQUIRED OF RESULTS OF PROJECT? YES X: NO \_\_\_.
6. WHAT STANDARDS ARE USED TO DETERMINE ACCEPTABILITY OF REPORT? Clarity, length, organization, analysis of results, consultation of relevant literature, format, proper scientific style, perceived knowledge of the material.
7. WHAT ACADEMIC CREDIT IS ALLOWED? One to three credits. Can be repeated for up to 6 credits. A minimum of three hours of laboratory work is generally expected for every credit of research.
8. TO WHAT EXTENT HAVE PROJECT RESULTS BEEN OF A PUBLISHABLE NATURE? 21 papers have been published in the last 5 years in peer reviewed journals. In addition results have been presented locally, at regional ACS meetings, at national ACS meetings, and at international meetings.
- RESEARCH GRANT? There is no specific item in the budget for this but nominal funds have been made available from the normal departmental allocation. Otherwise, funding must come from research grants. The Campus will award students \$250 per year for chemicals and supplies and will pay the student's expenses to attend the national NCUR meeting.

J. SERVICE COURSES

1. LIST BELOW THE UNDERGRADUATE CHEMISTRY COURSES GIVEN BY THE CHEMISTRY FACULTY ESPECIALLY FOR MAJORS IN CURRICULA OTHER THAN CHEMISTRY, SUCH AS BIOLOGY, ENGINEERING, PHYSICS, AGRICULTURE, HEALTH RELATED FIELDS, ETC.  
Consumer Chemistry, Introductory Chemistry, Quantitative Analysis, Organic Chemistry, and Biochemistry
2. DO UNDERGRADUATE CHEMISTRY MAJORS TAKE ANY OF THE ABOVE COURSES FOR CREDIT? YES X: NO \_\_\_ IF SO WHICH COURSES? All of the above with the exception of Consumer Chemistry.

- K. 1. IF "STANDARDIZED" TYPES OF FINAL EXAMINATIONS ARE USED IN LIEU OF OR COMPLEMENTARY TO FINAL EXAMINATIONS PREPARED BY THE FACULTY MEMBERS RESPONSIBLE FOR THE COURSES, LIST BELOW ALL SUCH COURSES AND TYPES OF EXAMINATIONS USED. PROVIDE PROFILES OF PERFORMANCE IN EACH FOR PAST TWO ACADEMIC YEARS (e.g., AVERAGE PERCENTILE RANK AND RANGE OF STUDENTS COMPARED TO NATIONAL NORMS).

| NAME OF COURSE        | EXAMINATION USED        | REQUIRED OF ALL STUDENTS | PATTERN OF PERFORMANCE    |
|-----------------------|-------------------------|--------------------------|---------------------------|
| Organic Chemistry     | ACS Organic Form 1994   | Yes                      | Student average is 60%ile |
| Quantitative Analysis | ACS Analytical Form '94 | Yes                      | Student average is 62%ile |
| Physical Chemistry    | ACS Physical Form 1994  | Yes                      | Student average is 58%ile |

Section III

9

Curriculum Summary (Continued)

2. DO YOU UNDERGRADUATE CHEMISTRY MAJORS TAKE DURING THE SENIOR YEAR THE GRADUATE RECORD OR SIMILAR TYPES OF COMPREHENSIVE EXAMINATIONS? YES X; NO    ARE ALL STUDENTS REQUIRED TO TAKE SUCH EXAMINATIONS? YES X; NO    PLEASE IDENTIFY THE EXAMINATIONS AND COMMENT BRIEFLY ABOUT STUDENT PERFORMANCE ON EACH. Comprehensive departmental generated exams for the subject areas of Analytical, Organic and Physical Chemistry are given to graduating seniors. Until last year these exams were voluntary and generally students opted to not take the exams so performance data is inconclusive.

L. FOREIGN LANGUAGES

ALTHOUGH THE ACS GUIDELINES NO LONGER REQUIRE A SCIENTIFIC READING KNOWLEDGE OF A FOREIGN LANGUAGE FOR THE CERTIFICATION OF GRADUATES, SUCH A KNOWLEDGE MAY BE VALUABLE, ESPECIALLY FOR THOSE GRADUATES CONTEMPLATING GRADUATE STUDY IN CHEMISTRY. DOES YOUR PROGRAM OR INSTITUTION HAVE ANY FOREIGN LANGUAGE REQUIREMENTS? YES :NO X.

1. IF SO, WHICH LANGUAGE OF LANGUAGES?

2. IF NOT, WHAT PERCENTAGE OF YOUR CHEMISTRY MAJOR GRADUATES DURING THE PAST FIVE YEARS ACQUIRED A SCIENTIFIC READING KNOWLEDGE OF A FOREIGN LANGUAGE PRIOR TO GRADUATION? 0, WHICH FOREIGN LANGUAGE WAS PREFERRED?

M. COMMUNICATIONS

DESCRIBE BRIEFLY ANY CURRICULAR REQUIREMENTS OR OTHER PROGRAMS DESIGNED TO ASSIST UNDERGRADUATE MAJORS TO ACQUIRE COMPETENCY IN

1. REPORT WRITING AND ENGLISH COMPOSITION Physical Chemistry laboratory fulfills the University writing and computer literacy requirements. Formal lab reports are required in this course as well as in Instrumental Analysis and Advanced Inorganic Chemistry.

2. ORAL PRESENTATIONS Oral reports are required in Advanced Organic Chemistry. Chemistry majors have presented papers at scientific meetings/conferences and also at the Chemistry Club (SAACS) meetings.

3. UNDERSTANDING AND USE OF TECHNICAL LITERATURE Some training in literature searching (manual and on-line) is given in Physical Chemistry, Instrumental Analysis. Additional training is provided in Advanced Organic and Biochemistry.

SECTION IV  
FACULTY AND SUPPORT STAFF

- A. COMPLETE FACULTY SUMMARY (SECTION IV - PART 2). PROVIDE A PERSONAL HISTORY RECORD FOR EACH FACULTY MEMBER.  
 B. COMPLETE TEACHING LOAD SUMMARY (SECTION IV - PART 3)  
 C. SALARY INFORMATION

1. PROVIDE DATA AS REQUESTED BELOW FOR FULL TIME FACULTY MEMBERS OF CHEMISTRY PROGRAM

PERMISSIBLE SALARY RANGE

PROFESSORS

ASSOCIATE PROFESSORS

ASSISTANT PROFESSORS

ASSOCIATES AND/OR LECTURERS

INSTRUCTORS

No uniform salary policy is in effect

2. HOW MANY MONTHS OF TEACHING PER CALENDAR YEAR ARE REQUIRED UNDER THE ABOVE SALARY SCHEDULE? 9  
 3. IF THERE IS NO UNIFORM SALARY POLICY, STATE BRIEFLY THE POLICY AND PRACTICE OF YOUR ADMINISTRATION IN DETERMINING SALARIES AND SALARY RANGES FOR THE SEVERAL PROFESSIONAL RANKS OF CHEMISTRY FACULTY.

Salaries are based upon figures provided by CUPA (College University Personnel Association), the ACS annual survey and recommendations of the department. Campus administration places the most weight upon the CUPA figures.

D. APPOINTMENTS AND PROMOTIONS

1. COMMENT BRIEFLY ABOUT CURRENT POLICIES AND PROCEDURES FOR CHEMISTRY FACULTY APPOINTMENTS AND PROMOTIONS.

Faculty are initially appointed after a national search. They are evaluated annually in the areas of teaching, research and service. A mandatory tenure decision is made in the sixth year by the department which is subject to Administrative approval. Promotions are initiated in the department, forwarded through the College and University Committees and Administrative channels. The same areas are evaluated as for tenure.

2. WHAT INPUT DOES THE CHEMISTRY DEPARTMENT HAVE ON MATTERS PERTAINING TO APPOINTMENTS, PROMOTIONS, AND TENURE?

The Department is the first level at which decisions are made concerning these matters. Without departmental approval, none of these decisions can be executed.

3. DISCUSS BRIEFLY THE AMOUNT OF FACULTY TURNOVER (PROFESSORIAL RANKS ONLY) OF CHEMISTRY FACULTY MEMBERS DURING THE LAST FIVE YEARS AND THE REASONS INVOLVED. ALSO, HOW MUCH CHANGE HAS OCCURRED IN TOTAL FACULTY SIZE DURING THE SAME PERIOD? USE SUPPLEMENTARY SHEET IF NECESSARY.

During the past five years the tenure track faculty has increased from 5 to 6. The additional member was added through conversion from an Academic Staff position. This position had been filled through a national search. During this period one faculty member has acquired tenure and been promoted to Associate Professor.

SECTION IV  
FACULTY AND SUPPORT STAFF (CONTINUED)

E FACULTY DEVELOPMENT

1. COMMENT BRIEFLY ON SUMMER ACTIVITIES OF FACULTY MEMBERS, ESPECIALLY WITH RESPECT TO OPPORTUNITIES TO REMAIN AT INSTITUTION AND OR PURSUE INDIVIDUAL RESEARCH PROJECTS. Faculty who pursue on campus research in the summer normally do so without any stipend and with minimal support of Departmental funds for supplies. Intramural research grants are highly competitive and few in number. One faculty member spent the summer at the University of Kansas on an NSF- Macro fellowship.
2. TO WHAT EXTENT DO FACULTY MEMBERS RECEIVE SUPPORT AND ENCOURAGEMENT FROM THE ADMINISTRATION FOR
  - a. INDIVIDUAL SCIENTIFIC RESEARCH. Scholarly activity individually and in conjunction with students is an expectation for tenure and promotion. Modest start up funds have recently been available for new hires. Various intramural grants, a grant office, and workshops are available.
  - b. COURSE DEVELOPMENT. Workshops and grants are available for this purpose. One faculty member applied for and received a University of Wisconsin System grant to develop inquiry-based laboratories.
  - c. INVOLVEMENT WITH SERVICE WORK FOR SCIENTIFIC COMMUNITY AND LOCAL COMMUNITY. Participation in professional organizations and service to the community are expectations for promotion and tenure. Faculty have been very involved in service, one member receiving the College Service Award. One faculty member is on the ACS exam writing committee for General Chemistry.
  - d. OTHER. Faculty members are doing collaborative research with faculty from other Universities. This has allowed them to obtain elemental analyses, high field NMR spectra, and use expensive computer programs not available here.
3. WHAT ARE PROVISIONS FOR SABBATICAL LEAVES?
  - a. DURATION. One quarter to one academic year.
  - b. FREQUENCY. Every six years.
  - c. PERCENT OF SALARY PAID. 50-100%
  - d. CONDITIONS FOR GRANTING. Length of instructional service, contributions to teaching, appointment status, external supplementary grants and departmental staffing status.
4. a. HOW MANY FACULTY MEMBERS HAVE REQUESTED SABBATICAL LEAVES DURING THE PAST 10 YEARS? 1. HOW MANY OF THESE HAVE BEEN GRANTED? 0.
  - b. REVIEW BRIEFLY WHERE SABBATICALS WERE SPENT, LENGTH OF EACH, NATURE OF WORK OR ACTIVITIES PERFORMED, ETC. (UP TO 10 INDIVIDUALS). Not applicable
5. IN WHAT OTHER WAYS ARE FACULTY MEMBERS ENCOURAGED AND SUPPORTED TO PARTICIPATE IN ACTIVITIES IMPORTANT TO SCHOLARLY AND PROFESSIONAL GROWTH? THE COMMITTEE WOULD ALSO FIND IT OF INTEREST AND VALUE TO LEARN ABOUT ANY UNUSUAL OR SPECIAL ACTIVITIES OF STAFF MEMBERS. The College of Letters and Sciences maintains a Professional Activities Fund which supports a variety of levels of participation in professional meetings ranging from regional to international categories. The maximum support, per individual is \$800. A person is allowed one trip unless surplus funds are available. The Department also provides supplementary funds up to \$200 for such activities.

SECTION IV  
FACULTY AND SUPPORT STAFF (CONTINUED)

F. STUDENT ASSISTANTS

| NUMBER | DEGREE SOUGHT     | HOURS PER WEEK REQUIRED | DIRECT CONTACT WITH STUDENTS |    | TYPE OF WORK PERFORMED | OTHER COMMENTS  |
|--------|-------------------|-------------------------|------------------------------|----|------------------------|---|
|        |                   |                         | YES                          | NO |                        |   |
| 1      | BS<br>MS<br>Ph.D. | variable                | yes                          |    | Stockroom assistant    | Only students on work study are employed. The department was allocated \$2000 for the past academic year. |

2. a. REVIEW BRIEFLY THE NATURE AND EXTENT OF TRAINING GIVEN TO STUDENT ASSISTANTS PRIOR TO ASSIGNMENT. Students are trained in basic stockroom procedures by the departmental stockroom manager.

b. IS TRAINING REQUIRED FOR ALL ASSISTANTS? YES X NO     

c. HOW IS PERFORMANCE OF STUDENTS SUPERVISED AND EVALUATED? Performance is supervised by the stockroom manager who also evaluates the students based on originally charted performance expectations.

3. IN WHICH UNDERGRADUATE LABORATORIES, IF ANY ARE UNDERGRADUATE STUDENTS ASSISTANTS USED? None

G. SUPPORT STAFF

WHAT PROVISIONS EXIST FOR STOCKROOM, CLERICAL, AND SECRETARIAL PERSONNEL? FURTHER, TO WHAT EXTENT ARE TECHNICIANS OR SERVICES AVAILABLE FOR THE MAINTENANCE AND REPAIR OF INSTRUMENTS AND OTHER ITEMS OF SPECIALIZED EQUIPMENT?

The Department employs a full-time stockroom manager who also serves as a technician to assist in minor electronic repairs, instrument maintenance, and glass blowing. Major glass blowing services are available through an arrangement with the full-time glassblower on staff at the University of Wisconsin-Milwaukee. General electronics and computer technicians are available on campus. The Department also employs a secretary at 87.5% time (full time in the regular academic year and half-time during the summer).

SECTION IV -PART 2  
CHEMISTRY FACULTY SUMMARY

INSTITUTION UW-Whitewater  
DATE 6/15/01

LIST NAMES AND RANKS OF ALL FACULTY MEMBERS ACCORDING TO RANK.

| NAME AND RANK                          | BACCALAUREATE DEGREE |                           | MASTERS DEGREE |                           | DOCTORAL DEGREE |                           | CHEMICAL SPECIALIZATION | YEAR JOINED | STATUS |    | TENURE |     |
|--|----------------------|---------------------------|----------------|---------------------------|-----------------|---------------------------|-------------------------|-------------|--------|----|--------|-----|
|  | YEAR OF BIRTH        | SCHOOL                    | YEAR           | SCHOOL                    | YEAR            | SCHOOL                    |                         |             | STAFF  | FT | AD.    | YES |
| Edward J. Drexler Professor            | 1938                 | Xavier University         | 1959           | Xavier University         | 1961            | Wayne St University       | Analytical              | 1964        | X      |    |        | X   |
| Philip T. Johns Associate Professor    | 1943                 | Gustavus Adolphus College | 1965           |                           |                 | Univ of North Dakota      | Biochemistry            | 1970        |        |    |        | X   |
| Steven W. Anderson Associate Professor | 1956                 | Carthage College          | 1978           | Marquette University      | 1981            | N. Illinois University    | Organic                 | 1985        |        |    |        | X   |
| Baocheng Han Associate Professor       | 1963                 | Jilun University          | 1985           |                           |                 | University of Houston     | Analytical              | 1990        |        |    |        | X   |
| Hassimi Traore Assistant Professor     | 1958                 | University of Ouagadougou | 1984           | University of Ouagadougou | 1989            | University of Iowa        | Physical                | 1995        |        |    |        | X   |
| Hephzibah Kumpaty Assistant Professor  | 1968                 | Kakatiya University       | 1988           | Kakatiya University       | 1990            | University of Mississippi | Organic                 | 1996        |        |    |        | X   |
| Kathryn Asala Lecturer                 | 1970                 | Truman St. University     | 1992           |                           |                 | Miami of Ohio             | Analytical              | 1996        |        |    |        | X   |
| Richard Schraufnager Lecturer          | 1950                 | Univ. Wisc. Madison       | 1972           | University of Texas       | 1974            | University of Texas       | Chemical Engineer       | 1977        |        |    |        | X   |
|  |                      |                           |                |                           | 1974            |                           |                         | 2000        |        | X  |        |     |

| NUMERICAL TOTAL             | FULL TIME |      | PART TIME |      | ADJUNCT |          |
|-----------------------------|-----------|------|-----------|------|---------|----------|
|                             | Ph.D.     | M.S. | Ph. D.    | M.S. | Ph.D.   | M.S.B.S. |
| NO. OF PROFESSORS           | 1         |      |           |      |         |          |
| NO. OF ASSOCIATE PROFESSORS | 3         |      |           |      |         |          |
| NO. OF ASSISTANT PROFESSORS | 2         |      |           |      |         |          |
| NO. OF INSTRUCTORS          | 1         |      | 1         |      |         |          |
| NO. OF GRADUATE ASSISTANTS  | 0         |      |           |      |         |          |

## CHEMISTRY FACULTY SUMMARY

INSTITUTION

UW-Whitewater

DATE

May-01

A. ARE MAXIMUM AND MINIMUM TEACHING LOADS ESTABLISHED AS AN INSTITUTIONAL POLICY? YES X; NO   . IF SO EXPLAIN BRIEFLY There is no legal min/max. Ordinarily the average for the institution is 12 credit hours /semester. This varies depending on many factors including contact hours, research arrangements, sabbaticals, assignment in non-teaching area(s) etc.

B. HOW MUCH TEACHING LOAD CREDIT IS ALLOWED FOR 1. FACULTY SUPERVISION OF STUDENT RESEARCH None (TOTAL AND PER STUDENT) None

2. DEPARTMENTAL COMMITTEE ASSIGNMENTS None

3. INSTITUTIONAL COMMITTEE ASSIGNMENTS None

C. PROVIDE BELOW THE CURRENT TEACHING LOAD, PLUS THE TOTAL ACTUAL LOAD (ACTUAL HOURS/WEEK), FOR EACH FACULTY MEMBER  
AY 2000-2001

| STAFF MEMBER<br>(LIST ACCORDING<br>TO RANK)     | FIRST SEMESTER                                     |          |    |      | SECOND SEMESTER |    |  |          |    |      |    |    |
|---|--|----------|----|------|-----------------|----|--|----------|----|------|----|----|
|   | COURSE TITLE AND NUMBER<br>TITLE (with enrollment) | CAT. NO. | 1* | 2*   | 3*              | 4* | COURSE TITLE AND NUMBER<br>TITLE       | CAT. NO. | 1* | 2*   | 3* | 4* |
| EXAMPLE:<br>J.T. Jones,<br>Professor            | General Chemistry                                  | 101      | 3  | 8    | 4               | 4  | General Chemistry                      | 103      | 6  | 8    | 4  | 13 |
|   | Physical chemistry                                 | 203      | 2  | 4    | 4               | 13 | Thermodynamics                         | 412      | 3  |      |    |    |
|   | Science, Technol. in<br>Society <sup>a</sup> (58)  | 600-150  | 4  |      |                 |    | Science, Technol. And.<br>Society (58) | 600-150  | 4  |      |    |    |
|   | Consumer Chem <sup>b</sup> (74)                    | 640-100  | 2  |      |                 |    | Consumer Chem (100)                    | 640-100  | 1  |      |    |    |
| E.J. Drexler,<br>Professor                      | Introductory Chem (49)                             | 640-104  | 4  |      |                 |    | Introductory Chem (100)                | 640-104  | 4  |      |    |    |
|   | Intro Chemistry Lab                                | 640-104  |    | 2.75 | 3               | 13 | Intro Chem Lab                         | 640-104  |    | 2.75 | 3  | 12 |
| P. T. Johns <sup>c</sup><br>Associate Professor | Introductory Chem (140)                            | 640-102  | 4  |      |                 |    | Organic Chemistry Lab                  | 640-261  |    | 5.5  | 6  |    |
|   | Intro Chemistry Lab                                | 640-102  |    | 2.75 | 3               | 7  | Laboratory (15)<br>Biochemistry(29)    | 640-456  | 3  |      |    | 9  |

LEGEND TO FOOTNOTES ON PAGE 15 A

CONTINUED ON NEXT PAGE

1\* - NUMBER OF CLASS HOURS OF LECTURE SCHEDULED PER WEEK

2\* - NUMBER OF CLOCK HOURS OF LABORATORY SCHEDULED WEEK

3\* - INDICATE IN THIS COLUMN THE APPROXIMATE NUMBER OF HOURS ACTUALLY SPENT IN LABORATORY FOR IMMEDIATE PERSONAL SUPERVISION OF STUDENTS.

4\* - SUM OF COLUMNS 1 AND 3 FOR EACH FACULTY MEMBER

SECTION IV - PART 2  
 CHEMISTRY FACULTY SUMMARY (CONTINUED)

UW-Whitewater  
 JUN-01

| AY 2000-2001<br>STAFF MEMBER<br>(LIST ACCORDING<br>TO RANK) | FIRST SEMESTER                                     |          |       |       | SECOND SEMESTER                  |          |       |       |
|---|--|----------|-------|-------|----------------------------------|----------|-------|-------|
|   | COURSE TITLE AND NUMBER<br>TITLE (with enrollment) | CAT. NO. | 1* 2* | 3* 4* | COURSE TITLE AND NUMBER<br>TITLE | CAT. NO. | 1* 2* | 3* 4* |
| S.W. Anderson<br>Associate Professor                        | Organic Chemistry(47)                              | 640-251  | 3     |       | Organic Chemistry (51)           | 640-252  | 3     |       |
|   | Organic Chem Lab(15)                               | 640-261  |       | 6     | Organic Chem Lab (13)            | 640-262  |       | 6     |
|   | Consumer Chem <sup>b</sup> (74)                    | 640-100  | 2     |       | Consumer Chem (100)              | 640-100  | 1     |       |
|   | Intro Chem Lab                                     | 640-102  |       | 3     | Intro Chem Lab                   | 640-102  |       | 3     |
| B. Han<br>Associate Professor                               | Quantitative Analysis(30)                          | 640-352  | 3     |       | Introductory Chem (40)           | 640-102  | 4     |       |
|   | Quant Lab  | 640-352  |       | 6     | Instrumental Analysis (7)        | 640-480  | 2     | 3     |
|   | Intro Chem Lab                                     | 640-102  |       | 3     | Introductory Chem Lab            | 640-102  |       | 3     |
|   | Consumer Chem Lab                                  | 640-100  |       | 2     |                                  |          |       | 12    |
| H. Traore<br>Assistant Professor                            | Physical Chemistry(6)                              | 640-370  | 3     |       | Physical Chemistry (6)           | 640-371  | 3     |       |
|   | Physical Chem Lab (6)                              | 640-470  |       | 4     | Physical Chem Lab (3)            | 640-471  |       | 4     |
|   | Consumer Chem Lab                                  | 640-100  |       | 4     | Consumer Chem (100)              | 640-100  | 1     |       |
|   | Intro Chem Lab                                     | 640-102  |       | 3     | Consumer Chem Lab                | 640-100  |       | 4     |
| H. Kumpaty<br>Assistant Professor                           | Organic Chem (11)                                  | 640-252  | 3     |       | Organic Chemistry (24)           | 640-251  | 3     |       |
|   | Organic Chem Lab(15)                               | 640-261  |       | 6     | Organic Chem Lab (15)            | 640-261  |       | 6     |
|   | Advanced Organic (6)                               | 640-455  | 3     |       | Introductory Chem Lab            | 640-102  |       | 3     |
|   | Consumer Chem Lab                                  | 640-100  |       | 2     |                                  |          |       | 12    |
| K. Asala<br>Lecturer  | Science & Technology in<br>Society                 | 600-150  | 4     |       | Introductory Chem (60)           | 640-102  | 4     |       |
|   | Introductory Chem Lab                              | 640-104  |       | 3     | Introductory Chem Lab            | 640-102  |       | 3     |
|   | Quant Analysis Lab                                 | 640-352  |       | 6     | Introductory Chem Lab            | 640-104  |       | 6     |
|   | Introductory Chem Lab                              | 640-102  |       | 9     |                                  |          |       | 13    |
| R. Schraufnagel<br>Lecturer                                 | Introductory Chem Lab                              | 640-102  |       | 3     | Introductory Chem Lab            | 640-102  |       | 3     |
|   | Introductory Chem Lab                              | 640-104  |       | 3     | Introductory Chem Lab            | 640-104  |       | 3     |
|   |  |          |       | 2.75  | Consumer Chem Lab                | 640-100  |       | 4     |

<sup>a</sup>This course is interdisciplinary, taught by Physics and Biology faculty in addition to Chemistry faculty. Therefore it has a College number.  
<sup>b</sup>The lecture portion of this course is team taught.  
<sup>c</sup>Release time of 1/2 in the Fall term and 1/4 in the Spring is accorded the Department Chair.

SECTION IV -PART 2  
CHEMISTRY FACULTY SUMMARY (CONTINUED)

INSTITUTION UW-Whitewater  
DATE May-01  
INTERM OR SUMMER SCHOOL X

| AY 2000-2001<br>STAFF MEMBER<br>(LIST ACCORDING<br>TO RANK) | THIRD TERM |    |      |    | COURSE TITLE AND NUMBER |       |          |    |    |    |    |
|---|------------|----|------|----|-------------------------|-------|----------|----|----|----|----|
|   | CAT. NO.   | 1* | 2*   | 3* | 4*                      | TITLE | CAT. NO. | 1* | 2* | 3* | 4* |
| P.T. Johns  | 640-102    | 7  | 2.25 | 3  | 10                      |       |          |    |    |    |    |
| Associate Professor   |            |    |      |    |                         |       |          |    |    |    |    |
| B. Han  | 640-102    | 7  | 2.3  | 3  | 10                      |       |          |    |    |    |    |
| Associate Professor   |            |    |      |    |                         |       |          |    |    |    |    |
| E.J. Drexler  | 640-104    | 7  | 2.25 | 3  | 10                      |       |          |    |    |    |    |
| Professor   |            |    |      |    |                         |       |          |    |    |    |    |
| H. Traore   | 640-104    | 7  | 2.3  | 3  | 10                      |       |          |    |    |    |    |
| Assistant Professor   |            |    |      |    |                         |       |          |    |    |    |    |

| AY 1999-2000                                    | FIRST SEMESTER |    |      |    | SECOND SEMESTER |  |          |    |      |    |    |
|---|----------------|----|------|----|-----------------|--|----------|----|------|----|----|
|   | CAT. NO.       | 1* | 2*   | 3* | 4*              | TITLE                                    | CAT. NO. | 1* | 2*   | 3* | 4* |
| E.J. Drexler<br>Professor                       | 600-150        | 8  |      |    |                 | Science Technology and<br>Society(58)    | 600-150  | 8  |      |    |    |
|   | 640-104        | 4  |      |    |                 | Introductory Chem(71)                    | 640-104  | 4  |      |    |    |
|   | 640-100        | 1  |      |    | 13              | Consumer Chem (52)                       | 640-100  | 1  |      |    | 13 |
| P. T. Johns <sup>c</sup><br>Associate Professor | 640-102        | 4  | 2.75 | 3  | 7               | Organic Chemistry Lab<br>Laboratory (15) | 640-261  |    | 5.5  | 6  |    |
|   | 640-102        |    |      |    |                 | Biochemistry(25)                         | 640-456  | 3  |      |    | 9  |
| S.W. Anderson                                   | 640-251        | 3  |      |    |                 | Organic Chemistry (44)                   | 640-252  | 3  |      |    |    |
| Associate Professor                             | 640-261        |    | 5.5  | 6  |                 | Organic Chem Lab (15)                    | 640-262  |    | 5.5  | 6  |    |
|   | 640-100        | 2  |      |    |                 | Consumer Chem <sup>b</sup> (74)          | 640-100  | 1  |      |    |    |
|   | 640-102        |    | 2.75 | 3  | 14              | Intro Chem Lab                           | 640-102  |    | 2.75 | 3  | 13 |

SECTION IV - PART 2  
 CHEMISTRY FACULTY SUMMARY (CONTINUED)

INSTITUTION LW-Whitewater  
 DATE May-01

| AY 1999-2000<br>STAFF MEMBER<br>(LIST ACCORDING<br>TO RANK) | FIRST SEMESTER                                    |          |        |       | SECOND SEMESTER                     |          |       |        |
|---|---|----------|--------|-------|-------------------------------------|----------|-------|--------|
|   | COURSE TITLE AND NUMBER                           | CAT. NO. | 1* 2*  | 3* 4* | COURSE TITLE AND NUMBER             | CAT. NO. | 1* 2* | 3* 4*  |
| B. Han<br>Associate Professor                               | Quantitative Analysis(31)                         | 640-352  | 3      |       | Introductory Chem (108)             | 640-102  | 4     |        |
|   | Quant Lab   | 640-352  | 5.5    | 6     | Advanced Inorganic (6)              | 640-460  | 3     | 2.75 3 |
|   | Intro Chem Lab                                    | 640-102  | 2.75   | 3     | Introductory Chem Lab               | 640-102  | 3     | 2.75 3 |
|   | Consumer Chem (55)                                | 640-100  | 1      | 13    | Consumer Chem (52)                  | 640-100  | 1     | 14     |
| H. Traore<br>Assistant Professor                            | Physical Chemistry(7)                             | 640-370  | 3      |       | Physical Chemistry (7)              | 640-371  | 3     |        |
|   | Physical Chem Lab (7)                             | 640-470  | 4      | 4     | Physical Chem Lab (6)               | 640-471  | 4     | 4      |
|   | Consumer Chem                                     | 640-100  | 1      |       | Consumer Chem (100)                 | 640-100  | 1     |        |
|   | Intro Chem Lab                                    | 640-102  | 5.5    | 6 14  | Intro Chem Lab                      | 640-102  | 5.5   | 6 14   |
| H. Kumpaty<br>Assistant Professor                           | Organic Chem (11)                                 | 640-252  | 3      |       | Organic Chemistry (24)              | 640-251  | 3     |        |
|   | Organic Chem Lab(15)                              | 640-261  | 5.5    | 6     | Organic Chem Lab (15)               | 640-261  | 5.5   | 6      |
|   | Advanced Organic (6)                              | 640-455  | 3      |       | Introductory Chem Lab               | 640-102  | 2.75  | 3 12   |
|   | Consumer Chem Lab                                 | 640-100  | 2      | 2 14  |                                     |          |       |        |
| L. Petro<br>Lecturer  | Science Technology and Society (58)               | 600-150  | 4      |       | Science Technology and Society (58) | 600-150  | 8     |        |
|   | Introductory Chem Lab                             | 640-104  | 2.75   | 3     | Introductory Chem Lab               | 640-104  | 5.5   | 6 14   |
|   | Quant Analysis Lab                                | 640-352  | 5.5    | 6 13  |                                     |          |       |        |
|   | Consumer Chem Lab                                 | 640-100  | 2      | 2     | Introductory Chem Lab               | 640-102  | 5.5   | 6      |
| K. Asala<br>Lecturer  | Introductory Chem Lab                             | 640-102  | 2.75   | 3     | Introductory Chem Lab               | 640-104  | 2.75  | 3      |
|   | Introductory Chem Lab                             | 640-104  | 5.5    | 6 11  | Consumer Chem Lab                   | 640-100  | 2     | 2 13   |
|   |   |          |        |       |                                     |          |       |        |
| AY 1999-2000  | THIRD TERM  |          |        |       | INTERM OR SUMMER SCHOOL X           |          |       |        |
| E.J. Drexler<br>Professor                                   | Introductory Chem (22)<br>(Taught 1/2 of session) | 640-102  | 7 2.25 | 3 10  |                                     |          |       |        |
| P.T. Johns<br>Associate Professor                           | Introductory Chem (22)<br>(Taught 1/2 of session) | 640-102  | 7 2.25 | 3 10  |                                     |          |       |        |

SECTION V  
STUDENTS AND COUNSELING

A. ADMISSIONS

ARE ENTERING STUDENTS TO YOUR INSTITUTION REQUIRED TO TAKE SAT, ACT, OR SIMILAR TYPES OF ADMISSIONS EXAMINATIONS? YES, X ; NO   . IF SO, INDICATE THE TYPES OF EXAMINATIONS AND THE RANGE AND/OR AVERAGE OF SCORES OF STUDENTS ACCEPTED. ALSO, IF SPECIAL ADMISSION REQUIREMENTS EXIST FOR ENTERING CHEMISTRY OR SCIENCE MAJORS, GIVE BRIEF DETAILS.

All in-state students are required to take the ACT exam. Out-of-state students may take the SAT exam which is then equated to the ACT. Average scores for admission are 21.9. There are no special admission requirements for entering chemistry or science majors.

B. COUNSELING

WHAT SERVICES ARE AVAILABLE TO COUNSEL STUDENTS ABOUT CAREER OPTIONS IN CHEMISTRY AND RELATED SCIENCES, FOR CURRICULUM GUIDANCE, FOR GRADUATE STUDY AND/OR OTHER INDIVIDUAL EDUCATIONAL NEEDS?

For career guidance the University has a Career Services office. An annual program on majors information is presented to acquaint students with science majors and career options. Specific career options to chemistry students are made available in the department by the Chemistry Club (SAACS) and faculty. The College of Letters and Sciences offers general advising through the Dean's office. All Chemistry majors are required to see their faculty advisor at least once a semester before they can register for classes.

C. GRADUATION AND PLACEMENT

PLEASE PROVIDE INFORMATION INsofar AS IT IS REASONABLY AVAILABLE ABOUT GRADUATES RECEIVING BACCALAUREATE DEGREES WITH A MAJOR IN CHEMISTRY WATCH YEAR FOR THE MOST RECENT FIVE YEARS. LIST ON SEPARATE SHEETS THE NAMES OF THE GRADUATES INDICATING FOR EACH THE YEAR OF GRADUATION, WHETHER CERTIFIED OR NOT IF YOUR DEPARTMENT IS ON THE APPROVED LIST, AND IF PLACED IN

1. GRADUATE SCHOOL - IDENTIFY GRADUATE SCHOOL AND FIELD OF STUDY
2. INDUSTRIAL POSITION - NAME COMPANY WHERE EMPLOYED
3. HIGH SCHOOL TEACHING - NAME SCHOOL

See page 17 A

D. FOLLOW-UP

WHAT PERCEPTION DO YOU HAVE OF HOW WELL YOUR BACCALAUREATE GRADUATES HAVE PERFORMED FOLLOWING GRADUATION? WHAT PERCEPTION DO YOUR STUDENTS HAVE OF THEIR UNDERGRADUATE TRAINING?

They have done very well! Greater than 90% are employed in chemistry, chemical related jobs, or are in graduate school.

## GRADUATION AND PLACEMENT

| <u>GRADUATION YEAR</u> | <u>NAME</u>           | <u>GRADUATE SCHOOL</u>                      | <u>INDUSTRIAL POSITION</u>         | <u>HIGH SCHOOL TEACHING</u> |
|------------------------|-----------------------|---|------------------------------------|-----------------------------|
| 1995                   | Adly Azman            |   | Motorola                           |                             |
|                        | Christian Griffin     |   | Oak Valley Landscaping             |                             |
|                        | David Weymier         |   | Serigraph, Inc.                    |                             |
|                        | Eric Nkabyo           | Purdue University (Medicinal chemistry)     | PPG Industries                     |                             |
|                        | Jennifer Erickson     |   | Ray-O-Vac                          |                             |
|                        | Jill A. McLuckie      |   | Stepan Chemical                    |                             |
|                        | Mark Watry            | University of Oregon (Physical chemistry)   |                                    |                             |
|                        | Peter Sill            | Kansas State University (Organic chemistry) |                                    |                             |
|                        | Shawn Schiller        | Texas A & M (Organic chemistry)             |                                    |                             |
|                        | Timothy J. Effertz    |   |                                    |                             |
| 1996                   | John Blankenburg      |   | Hansen Chr Laboratory              |                             |
|                        | Luke Huberty          |   | Miller Brewing                     |                             |
|                        |                       |   | Covance                            |                             |
| 1997                   | Jennifer Gregorius    |   | U.S. Chemical                      |                             |
| 1998                   | Peter Cronin          | Medical College of Wisconsin                |                                    |                             |
|                        | Paul Monet            |   | Aldrich Chemical                   |                             |
| 1999                   | Dori Lewis            | Ohio University (Forensic Chemistry)        |                                    |                             |
|                        | Amahda Pruefer        |   |                                    |                             |
|                        | Megan Fluenz          | Miami University (Organic)                  |                                    |                             |
|                        | Scott M. Fisher       |   |                                    |                             |
|                        | Kenneth Budill        |   |                                    |                             |
| 2000                   | Scott Blasiman        |   | Nalco Chemical Co.                 |                             |
|                        | Nicholas D'Alessandro |   |                                    |                             |
|                        | Michael Saunders      | Montana State (Organic)                     | Environmental Testing Laboratories |                             |
|                        | Angela Masino         |   |                                    |                             |
|                        | Nicholas Delboccio    |   |                                    | Covance<br>Mt. Prospect, IL |

| <u>GRADUATION YEAR</u> | <u>NAME</u>     | <u>GRADUATE SCHOOL</u> | <u>GRADUATION AND PLACEMENT</u> | <u>INDUSTRIAL POSITION</u> | <u>HIGH SCHOOL TEACHING</u> |
|------------------------|-----------------|------------------------|---------------------------------|----------------------------|-----------------------------|
| 2001                   | John Mach       |                        |                                 | Northland Laboratories     |                             |
|                        | Crista Laatsch  |                        |                                 | Covance                    | searching                   |
|                        | Jennifer Riege  |                        |                                 |                            | searching                   |
|                        | Daniel Anderson |                        |                                 |                            | Milton                      |
|                        | Michelle Tjugum |                        |                                 |                            |                             |
|                        | Kimberly Pare   |                        |                                 |                            |                             |

SECTION VI  
FACILITIES

- A. CHECK IN THE APPROPRIATE COLUMN THE ADEQUACY OF SPACE AVAILABLE FOR THE CHEMISTRY PROGRAM  
(See section H below)

|                        | SATISFACTORY | CROWDED | NOT AVAILABLE |
|------------------------|--------------|---------|---------------|
| LECTURE CLASSROOMS     | X            |         |               |
| LABORATORIES FOR       |              |         |               |
| INTRODUCTORY CHEMISTRY | X            |         |               |
| QUANTITATIVE ANALYSIS  | X            |         |               |
| INORGANIC              | X            |         |               |
| ORGANIC                |              |         |               |
| PHYSICAL               |              | X       |               |
| INSTRUMENTAL           |              | X       |               |
| STUDENT RESEARCH       |              |         | See sec. H    |
| FACULTY RESEARCH       |              |         | See sec. H    |

- B. INSTRUMENTATION AND EQUIPMENT

LIST ON A SEPARATE SHEET ALL MAJOR ITEMS OF INSTRUMENTATION AND EQUIPMENT (VALUE \$1000 OR MORE) AVAILABLE FOR UNDERGRADUATE PROGRAM. See page 18 A

- C. LIBRARY

1. IS LIBRARY IN CHEMISTRY BUILDING? YES: NO X. IF NOT, WHERE IS IT AND HOW FAR FROM CHEMISTRY BUILDING? The Chemistry collection is in the University library located one block from the science building.
2. APPROXIMATE NUMBER OF BOUND BOOKS AND VOLUMES (CHEMICAL TEXTS AND JOURNALS OR EQUIVALENT ON MICROFILM). 3,500
3. NUMBER OF CURRENT PERIODICALS (ATTACH LIST IF TWENTY OR LESS)
  - a. IN CHEMISTRY LIBRARY \_\_\_: IN COLLEGE LIBRARY \_\_\_: see p 18 B
4. DO CURRENT SUBSCRIPTIONS INCLUDE CHEMICAL ABSTRACTS? YES: NO X. WITH ANNUAL INDEXES? YES: NO \_\_\_
5. ARE COMPUTER SEARCH FACILITIES AVAILABLE? YES: X: NO \_\_\_: IF YES, WHERE? University Library. We will be negotiating to bring this within the Department.
6. ARE OTHER EXTENSIVE CHEMISTRY LIBRARY FACILITIES AVAILABLE IN COMMUNITY? YES: X: NO \_\_\_: IF YES, DISCUSS BRIEFLY. UW-Madison, UW-Milwaukee, and Marquette University are all located less than one hour from Whitewater. The resources at their chemistry libraries are freely accessible. We also have access on this campus to the Bellstein Crossfire database via computer link to UW-Madison. ACS Journals on-line and CARL Uncover.
7. ARE FILM READERS AVAILABLE IN CHEMISTRY LIBRARY? YES: NO X. IN COLLEGE LIBRARY? YES X: NO \_\_\_
8. ARE READING ROOM FACILITIES AVAILABLE IN CHEMISTRY BUILDING? YES: NO X. IF YES, DESCRIBE BRIEFLY THE LIBRARY RESOURCES IN READING ROOM.

## MAJOR DEPARTMENTAL EQUIPMENT

| <u>Type</u>   | <u>Date purchased</u> | <u>Approximate cost</u> |
|---|-----------------------|-------------------------|
| <u>Chromatoaraphy</u>   |                       |                         |
| Shimadzu LC-10AS Liquid Chromatograph<br>with SPD-10A UV detector and CR501<br>Chromatopac integrator | 1992                  | \$ 12,708               |
| Shimadzu GC-BAIT Isothermal Gas<br>Chromatographs (two; TCD)  | 1994                  | 9,039                   |
| Perkin-Elmer 3920B Gas Chromatograph  | 1976                  | 5,785 (FID)             |
| Hewlett-Packard 6890<br>Gas chromatograph - Mass Spectrometer   | 1995                  | 70,000                  |
| <u>Spectroscopy</u>   |                       |                         |
| Shimadzu AA 6200 Atomic Absorption<br>Spectrophotometer   | 2001                  | 16,670                  |
| Hewlett Packard 35900E Gas Chromatography Data Station  | 2000                  | 8,988                   |
| Mettler DSC821E Differential scanning calorimeter   | 2000                  | 24,000                  |
| Hewlett Packard Ultraviolet -visible<br>Spectrophotometer   | 2000                  | 12,705                  |
| Hitachi R-1200 NMR  | 1993                  | 67,461                  |
| Bomem MB-100 FTIR   | 1992                  | 17,000                  |
| Perkin-Elmer Lambda 4B UV Visible<br>Spectrophotometer  | 1986                  | 13,375                  |
| Varian T60A NMR with Spin Decoupler   | 1 984                 | 11,000                  |
| <u>Electrochemical</u>  |                       |                         |
| EG & G Par Electrochemical analyzer   | 1992                  | 11,855                  |

**MAJOR DEPARTMENTAL EQUIPMENT**

**Other**

|                          |              |               |
|--------------------------|--------------|---------------|
| <b>Glove box</b>         | <b>1999</b>  | <b>3,800.</b> |
| <b>Rotary evaporator</b> | <b>1999</b>  | <b>2,700</b>  |
| <b>Oscilloscope</b>      | <b>1999</b>  | <b>7,685</b>  |
| <b>Bomb Calorimeter</b>  | <b>1 999</b> | <b>2,500</b>  |
| <b>He-Ne lasers (6)</b>  | <b>2000</b>  | <b>6,000</b>  |

## SECTION VI.C.3 (continued)

### ACTIVE JOURNAL LIST

#### **I. General Content**

Chemical Reviews  
Journal of Chemical Education  
Journal of the American Chemical Society  
Journal of the Chemical Society (London)  
    Chemical Communications  
Nature  
Science

#### **II. Topical**

##### **A. Highly Recommended**

Analytical Chemistry  
Biochemistry  
Inorganic Chemistry  
Journal of Chemical Physics  
The Journal of Organic Chemistry The Journal of Physical Chemistry  
Journal of the Chemical Society London (London)  
    Dalton Transactions  
    Faraday Transactions  
    Perkin Transactions I  
    Perkin Transactions II

##### **B. Also Recommended**

Chemical Society Reviews

#### **III. Additional Current Journals**

American Druggist  
Annual Review of Nuclear and Particle Science  
Chemical and Engineering News  
Chemical Engineering  
Chemical Marketing Reporter  
Chemical Week  
Drug and Cosmetic Industry  
Drug Topics  
Journal of Computational Chemistry  
Journal of Hazardous Materials  
Journal of Physical and Chemical Reference Data  
Science Teacher Technometrics

SECTION VI  
FACILITIES (CONTINUED)

D. ADDITIONAL LEARNING RESOURCES

1. ARE LECTURE DEMONSTRATION FACILITIES AVAILABLE AND ADEQUATE? YES: NO X. IF NOT, EXPLAIN. A small room (191 sq. ft.) is available in the basement to set up demonstrations for an adjacent large lecture hall. This room only has electrical service and no water or hood. Demonstrations are normally prepared in the chemistry stockroom or in instructional laboratories. There is no room or facility in a room that is dedicated to performing lecture demonstrations.
2. DESCRIBE BRIEFLY THE USE AND AVAILABILITY OF
  - a. COMPUTER FACILITIES The Department has just acquired, through an NSF grant, 8 Silicon Graphic computers for molecular modeling. The science building has a computer lab with 10 G-4 Macs and 10 Pentium II windows machines. There are several computer labs open to students on campus. Each faculty member has a computer that can be replaced every three years.
  - b. AUDIO AND FILM FACILITIES The University Instructional Technology Service provides assistance in photo/graphics, audio/TV and video, including satellite media. AV equipment is obtained through this office. The learning materials Center maintains a collection of AV resources for classroom use.
  - c. OTHER LEARNING RESOURCES Chemistry's primary lecture room is equipped with a video projector, computer with web connection and an ELMO unit. All classrooms in the remodeled science building will have modern AV capabilities.

E. SERVICE FACILITIES

INDICATE WHETHER OR NOT THE FOLLOWING FACILITIES ARE AVAILABLE, WHERE LOCATED, AND IF ADEQUATE.

1. STOCKROOM This is located adjacent to the instructional laboratories with supplemental space in the basement. The facilities, at present, are adequate.
2. MACHINE SHOP The department does not have a dedicated machine shop. A workbench with some equipment is located in the back of the stockroom and other equipment (e.g. a drill press) is scattered around the department. The Physics department has a small machine shop which could be used with advance notice. Work can also be commissioned through Campus Facilities.
3. ELECTRICAL AND INSTRUMENTAL EQUIPMENT MAINTENANCE AND REPAIR The Department does not have a dedicated facility for this purpose. A small inventory of equipment is available in the department for maintenance and repairs. The campus employs two full-time electronics technicians and two full-time computer technicians with well-equipped facilities. With solid state equipment, electronic repairs are not as prevalent as in the past.
4. GLASS BLOWING The department has a glass blowing bench located within a research lab. The bench is equipped with torches, a spangle, a lathe and other tools.

SECTION VI  
FACILITIES (CONTINUED)

## F. SAFETY (REFER TO 1999 GUIDELINES, PAGE 14)

1. INDICATE BY "YES" OR "NO" IF ALL INSTRUCTIONAL LABORATORIES ARE SUITABLY EQUIPPED WITH ALTERNATE EXITS YES; SHOWERS YES; EYE WASH FACILITIES YES; FIRE BLANKETS NO; FIRE EXTINGUISHERS YES; GAS MASKS NO; HOODS AND VENTILATION YES; BENCH SERVICES YES; LIGHTING YES; EXPLAIN AND EXCEPTIONS. Fire blankets and gas masks are available in the Chemistry stockroom which is located adjacent to the instructional laboratories.

2. HOW OFTEN ARE SAFETY EQUIPMENT AND FACILITIES INSPECTED? The university physical plant inspects the hoods every semester. Eye washes are inspected on an intermittent basis although the Department has requested bi-weekly inspection. Extinguishers are inspected twice yearly by an outside contractor.

3. WHAT FACILITIES ARE AVAILABLE FOR THE STORAGE, HANDLING AND DISPOSAL OF HAZARDOUS CHEMICALS? Containers for hazardous waste are located in each instructional laboratory. Storage, handling and disposal is conducted by the department lab technician in cooperation with the office of Environmental Health Risk Management, Safety and Loss Control.

4. EXPLAIN BRIEFLY THE TECHNIQUES OR PROCEDURES USED TO TEACH AND ENFORCE SAFETY MEASURES AND PRECAUTIONS. Check-in to all instructional laboratories is preceded by a discussion/demonstration lecture on safety issues and equipment in the laboratory. This is mandatory for all students; if it is missed a student is dropped from the course. Students are asked to read a sheet outlining safety rules and regulations. They are required to sign this sheet, indicating their awareness and commitment to adhere to policy.

5. IS THE USE OF SAFETY GLASSES REQUIRED IN ALL LABORATORIES? YES; X; NO

G. TO WHAT EXTENT WOULD PRESENT FACILITIES ACCOMMODATE CHANGING ENROLLMENT IN CHEMISTRY COURSES? WHAT ARE THE PRESENT TRENDS IN CHEMISTRY COURSE ENROLLMENTS? For students majoring in chemistry, this program has the capacity to accommodate significant enrollment increase. Chemistry has seen an increased enrollment in most of its courses and those courses not predominately populated by Chemistry majors are generally filled to capacity. The number of Chemistry majors has increased from around 20 to about 40. This has allowed courses such as Instrumental Analysis and Advanced Inorganic to be offered without a need to petition the Dean.

H. PLEASE OUTLINE ANY SIGNIFICANT CHANGES, MADE OR PLANNED, IN FACILITIES IN THE LAST FIVE YEARS. Upham Hall, which houses all of the science departments, was constructed in 1963, when the main focus of our campus was on classroom instruction. We are seriously deficient in faculty and student research space. In the next couple of years Upham Hall will be remodeled and an addition added. We are currently at the architectural drawing stage for this \$25 million dollar project. As a part of the project each faculty member will be getting a 400 square foot research laboratory adjacent to their office. In addition to faculty/student research space, new teaching laboratories will be built with additional hoods and improved ventilation.

VIII. GENERAL

21

DISCUSS BELOW ANY FEATURES OF YOUR UNDERGRADUATE CHEMISTRY PROGRAM NOT MENTIONED IN THE PRECEDING SECTIONS OF THIS REPORT THAT YOU BELIEVE ARE SIGNIFICANT. ALSO, DISCUSS BRIEFLY AND FUTURE PLANS OF PROJECTIONS CURRENTLY UNDER CONSIDERATION THAT MAY INVOLVE THE PROGRAM.

Faculty in this department have typically devoted generous amounts of time to students wishing to pursue disproportionately time-consuming independent study (i.e., research) activities. It is expected that these pursuits will be augmented and strengthened by the planned renovation of Upham Hall.

The remodeled Upham Hall includes a computational laboratory to accommodate molecular modeling, M.O. calculation, etc.

In addition to the ACS approved track for a Chemistry major, The Department and College is considering additional Environmental Chemistry.

**FACULTY PERSONAL HISTORY RECORD**

Name Anderson Steven William  
 Date of Birth: 4/3/1956 School University of Wisconsin-Whitewater  
 DATE 6/15/2001

| EDUCATION                          |   |   |                         |
|------------------------------------|---|---|-------------------------|
| School                             | Degree  | Year  | Field of Specialization |
| Undergrad<br>Carthage College      | B.A.  | 1978  | Chemistry               |
| Graduate<br>Marquette University   | M.S.  | 1981  | Organic Chemistry       |
| Northern Illinois University       | Ph.D.   | 1985  | Organic Chemistry       |
| POSITIONS HELD SINCE LAST DEGREE   |   |   |                         |
| SCHOOL OR ORGANIZATION             | Title   | Dates   |                         |
| University of Toronto              | Postdoctoral Fellow   | From 1984   | To 1987                 |
| University of Wisconsin-Whitewater | Assistant Professor   | 1987  | 1992                    |
| University of Wisconsin-Whitewater | Associate Professor   | 1992  | present                 |
| COURSES TAUGHT                     |   |   |                         |
| TYPE                               | SOCIETY MEMBERSHIPS   | Offices Held  | Clock Hrs/Week          |
| Scientific                         | American Chemical Society<br>Organic Division<br>Division of Chemical Education<br>Interamerican Photochemical Society<br>Council of Undergraduate Research |   | Lect                    |
|                                    |   |   | Lab                     |
|                                    |   |   | Total                   |
|                                    |   |   | Size of section         |
| Honorary                           | Society of Sigma Xi<br>Theta Chi Delta<br>Golden Key  |   | Lect                    |
|                                    |   |   | Lab                     |
|                                    |   |   | Total                   |
|                                    |   |   | Size of section         |
| Thesis                             |   | Topic   |                         |
| CURRENT RESPONSIBILITIES           |   | Thesis  |                         |
| STATUS FULL TIME X PART            |   | Correlation of Solvolysis Rates of Sulfonium and Thiophenium Ions |                         |
| FACULTY TITLE Associate Professor  |   | Director of Thesis Work   Dr. Dennis N. Kevill                    |                         |
| Directs Research [Thesis]          |   |   |                         |
| M. S. _____ Ph.D. _____            |   |   |                         |
| Consultant Chemist:                |   |   |                         |

**FACULTY PERSONAL HISTORY RECORD**

Name Asela Kathryn  
 Date of Birth: 9/4/1970 School University of Wisconsin-Whitewater  
 DATE 6/15/2001

| EDUCATION                           |        |      | Field of Specialization | Thesis   |
|-------------------------------------|--------|------|-------------------------|--|
| School                              | Degree | Year |                         |  |
| Truman State Univ<br>Kirksville, Mo | B.S.   | 1992 | Chemistry               | Topic: Electroanalytical Studies of Solid Electrolytes in the Presence and Absence of a Liquid Phase |
| Miami of Ohio                       | Ph. D. | 1996 | Analytical Chemistry    | Director of Thesis Work<br>Dr. James A. Cox  |
|                                     |        |      |                         | CURRENT RESPONSIBILITIES<br>STATUS FULL TIME X<br>FACULTY TITLE Lecturer PART                        |
| POSITIONS HELD SINCE LAST DEGREE    |        |      |                         | Directs Research [Thesis ]<br>M. S. _____ Ph.D. _____<br>Consultant Chemist:                         |

| SCHOOL OR ORGANIZATION             | Title                 | Dates        |
|------------------------------------|-----------------------|--------------|
|                                    |                       | From To      |
| Iowa State University              | Postdoctoral Research | 1997 1998    |
| Iowa State University              | Temporary Instructor  | 1998 1999    |
| University of Wisconsin-Whitewater | Instructor            | 1999 Present |

| SOCIETY MEMBERSHIPS |         | Courses Taught |                            |                         |
|---------------------|---------|----------------|----------------------------|-------------------------|
| TYPE                | Society | Offices Held   | Clock Hrs/Week             | Size of section         |
| Scientific          |         | Undergrad      | Lect 4<br>Lab 0<br>Total 9 | 4<br>4<br>9<br>60<br>20 |
| Honorary            |         | Graduate       |                            |                         |



**FACULTY PERSONAL HISTORY RECORD**

Name Han Baocheng  
 Date Of Birth: 6/21/1963  
 School University of Wisconsin-Whitewater  
 DATE 6/15/2001

| EDUCATION   |        |      |
|---|--------|------|
| School  | Degree | Year |
| Jilan University<br>People's Republic<br>of China | B.Sc.  | 1985 |
| University of Houston<br>Houston, Texas           | Ph.D.  | 1990 |

**Thesis**  
 Topic Electrochemical Studies of Nickel metallophorphyrins  
 Director of Thesis Work | Dr. Karl M Kadish

**CURRENT RESPONSIBILITIES**  
 STATUS FULL TIME X PART  
 FACULTY TITLE Associate Professor

**POSITIONS HELD SINCE LAST DEGREE**

| SCHOOL OR ORGANIZATION             | Title                        | Dates        |
|------------------------------------|------------------------------|--------------|
|                                    |                              | From To      |
| Houston Community College          | Instructor                   | 1990 1995    |
| University of Houston              | Visiting Assistant Professor | 1990 1995    |
| University of Wisconsin-Whitewater | Assistant Professor          | 1995 2000    |
| University of Wisconsin-Whitewater | Associate Professor          | 2000 present |

**Directs Research [Thesis]**  
 M. S. \_\_\_ Ph.D. \_\_\_  
 Consultant Chemist:

| SOCIETY MEMBERSHIPS |                           | Courses Taught          |                |                 |
|---------------------|---------------------------|-------------------------|----------------|-----------------|
| TYPE                | Society                   | Offices Held            | Clock Hrs/Week |                 |
|                     |                           |                         | Lect           | Size of section |
| Scientific          | American Chemical Society |                         | 4              | 40              |
|                     |                           | Undergrad               | 0              | 4               |
|                     |                           | Introductory Chem       | 3              | 20              |
|                     |                           | Introductory Chem (lab) | 3              | 7               |
|                     |                           | Instrumental Analysis   | 5              |                 |
| Honorary            |                           | Graduate                |                |                 |

**FACULTY PERSONAL HISTORY RECORD**

Name Johns Philip Timothy  
 Date of Birth: 7/17/1943 School University of Wisconsin-Whitewater  
 DATE 6/5/2001

| EDUCATION   |  |              | Field of Specialization | Thesis Topic  |
|---|--|--------------|-------------------------|---|
| School  | Degree   | Year         |                         |   |
| Undergrad   | Mankato State Univ<br>Mankato, MN<br>Gustavus Adolphus<br>St. Peter, Mn  | 1965         | Chemistry               | Nature of Catalysis of<br>Glucose 6-Phosphatase<br>Director of Thesis Work<br>Dr. Robert C. Nordlie |
| Graduate  | University of North<br>Dakota<br>Grand Forks, ND   | 1972         | Biochemistry            | CURRENT RESPONSIBILITIES<br>STATUS FULL TIME X PART<br>FACULTY TITLE                                |
| POSITIONS HELD SINCE LAST DEGREE  |  |              |                         |   |
| SCHOOL OR ORGANIZATION  | Title  | Dates        |                         |   |
|   |  | From         | To                      |   |
| University of Florida   | Post-doctoral Fellow   | 1970         | 1970                    |   |
| Virginia Union University   | Assistant Professor  | 1972         | 1976                    |   |
| University of Wisconsin-Whitewater  | Assistant Professor  | 1976         | 1990                    |   |
| University of Wisconsin-Whitewater  | Associate Professor  | 1990         | present                 |   |
| DIRECTS RESEARCH [Thesis]<br>M. S. _____ Ph.D. _____<br>Consultant Chemist: |  |              |                         |   |
| COURSES TAUGHT  |  |              |                         |   |
| TYPE  | SOCIETY MEMBERSHIPS  |              | Courses Taught          |   |
|   | Society  | Offices Held | Course                  | Clock Hrs/Week  |
| Scientific  | American Chemical Society<br>Biological Chemistry Division<br>Division of Chemical Education<br>American Association for<br>the Advancement of Science |              | Undergrad               | Lect  |
|   |  |              | Biochemistry<br>Organic | Lab   |
|   |  |              |                         | Total   |
|   |  |              | 3                       | 0   |
|   |  |              | 6                       | 6   |
|   |  |              |                         | 29  |
|   |  |              |                         | 15  |
| Honorary  | Society of Sigma Xi  |              |                         |   |
|   |  |              |                         |   |
|   |  |              |                         |   |

**FACULTY PERSONAL HISTORY RECORD**

Name Kumpaty Hephzibah Jayasheela

Date Of Birth: 6/4/1968

School University of Wisconsin-Whitewater  
DATE 6/15/2001

| EDUCATION                               |  |               | Field of Specialization                                | Thesis   |
|---|--|---------------|--|--|
| School                                  | Degree   | Year          |  |  |
| Undergrad                               | Kakatiya University                              | B.S.          | 1988<br>Chemistry                                      | Topic: The Synthesis of Mono-substituted Disulfide Functionalized 2,2'biipyridines and the Corresponding Ruthenium Complexes for Self Assembled Studies<br>Director of Thesis Work<br>Dr. Charles Panetta & Dr. Norman E. Helmer |
| Graduate                                | Kakatiya University<br>University of Mississippi | M.S.<br>Ph.D. | 1990<br>1996<br>Organic Chemistry<br>Organic Chemistry |  |
| <b>POSITIONS HELD SINCE LAST DEGREE</b> |  |               |  |  |
| <b>SCHOOL OR ORGANIZATION</b>           |  |               |  |  |
|   |  |               | Directs Research [Thesis ]                             |  |
|   |  |               | M. S. _____ Ph.D. _____                                |  |
|   |  |               | Consultant Chemist:                                    |  |
| University of Wisconsin-Whitewater      |  |               | Instructor   |  |
| University of Wisconsin-Whitewater      |  |               | Assistant Professor                                    |  |
|   |  |               | Dates  |  |
|   |  |               | From To  |  |
|   |  |               | 1996 1999  |  |
|   |  |               | 1999 present   |  |

| TYPE       | SOCIETY MEMBERSHIPS   |  | Offices Held |  | Courses Taught               |      |     | Clock Hrs/Week |    | Size of section |
|------------|---|--|--------------|--|------------------------------|------|-----|----------------|----|-----------------|
|            | Society   |  |              |  | Course                       | Lect | Lab | Total          |    |                 |
| Scientific | American Chemical Society<br>Organic Division<br>Division of Chemical Education |  |              |  | Undergrad                    | 3    | 0   | 3              | 24 |                 |
|            |   |  |              |  | Organic Chemistry            |      | 6   | 6              | 15 |                 |
|            |   |  |              |  | Organic Chemistry (lab)      |      |     | 3              | 3  | 15              |
| Honorary   |   |  |              |  | Introductory Chemistry (lab) |      |     |                |    |                 |
|            |   |  |              |  | Graduate                     |      |     |                |    |                 |

**FACULTY PERSONAL HISTORY RECORD**

Name Schraufnagel Richard  
 Date of Birth 4/8/1950 School University of Wisconsin-Whitewater  
 DATE 6/15/2001

| EDUCATION                       |        |      |                         |
|---------------------------------|--------|------|-------------------------|
| School                          | Degree | Year | Field of Specialization |
| University of Wisconsin Madison | B.S.   | 1972 | Chemical Engineering    |
| University of Texas             | M.S.   | 1974 | Chemical Engineering    |
| University of Texas             | Ph.D.  | 1977 | Chemical Engineering    |

| POSITIONS HELD SINCE LAST DEGREE        |                           |
|---|---------------------------|
| SCHOOL OR ORGANIZATION                  | Title                     |
| Atlantic Richfield                      | Senior Research Engineer  |
| Gas Research Institute                  | Principal Project Manager |
| Roosevelt University/Joliet Jr. College | Adjunct faculty           |
| University of Wisconsin-Whitewater      | Instructor                |

| CURRENT RESPONSIBILITIES      |               |
|-------------------------------|---------------|
| STATUS                        | FULL TIME     |
|                               | PART <u>X</u> |
| FACULTY TITLE <u>Lecturer</u> |               |

| Thesis  |                         |
|---|-------------------------|
| Topic   | Director of Thesis Work |
| Effect of Geometry on Flame Spread Over Polyurethane Foam | Dr. Joel Barlon         |

| Directs Research [Thesis] |       |
|---------------------------|-------|
| M. S.                     | Ph.D. |
| _____                     | _____ |
| Consultant Chemist:       |       |

| SOCIETY MEMBERSHIPS |              |                          |                 |
|---------------------|--------------|--------------------------|-----------------|
| TYPE                | Offices Held | Courses Taught           | Clock Hrs/Week  |
|                     |              | Course                   | Lect Lab Total  |
| Scientific          |              | Undergrad                |                 |
|                     |              | Consumer Chemistry (lab) | 0 4 4           |
|                     |              | Introductory Chem (102)  | 0 3 3           |
| Honorary            |              | Graduate                 |                 |
|                     |              | Introductory Chem (104)  | 0 3 3           |
|                     |              |                          | Size of section |
|                     |              |                          | 20              |
|                     |              |                          | 20              |
|                     |              |                          | 20              |

